College Park Neighborhood

PATTERN BOOK

A Guide for Improving Homes and Neighborhoods

URBAN DESIGN ASSOCIATES

FINAL DRAFT
17 JUNE 2011

College Park Neighborhood PATTERN BOOK

A Guide for Improving Homes and Neighborhoods

PREPARED BY

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Pittsburgh, Pennsylvania

Design Workshop
Aspen, Colorado

PREPARED FOR

The City of College Park
College Park, Maryland

JUNE 2011

To Our Readers

Introduction letter from:

Andrew M. Fellows
Mayor, City of College Park

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SECTION A INTRODUCTION


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INTRODUCTION

In 2010, the City of College Park City Council approved a contract with Urban Design Associates for the development of a residential Pattern Book. A steering committee comprised of residents, architects, builders, and property owners were convened to provide input into the process. A public meeting was held on January 10, 2011 to begin the process and gather information. A series of focus group meetings were also held with interested stakeholders.

The City of College Park has an aging housing stock and as homeowners have upgraded and expanded their houses, the need for a Pattern Book to guide work in an appropriate direction was identified. This non-regulatory document serves to inspire anything from new home construction to a weekend home improvement project. The Pattern Book's audience includes, but is not limited to, home owners, landlords, neighborhood associations, architects, builders, developers, and economic development officials. The contents presented in this guide reflect the most common projects, such as landscaping, renovations, additions, and neighborhood-wide efforts.

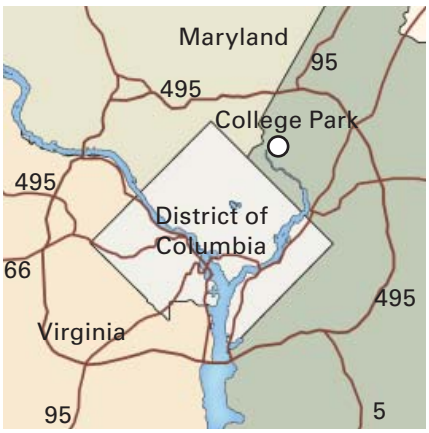
College Park is a great place to live, but it could become an even more remarkable college town. With the appropriate revitalization efforts including upgrading current housing stock, improving streets and public spaces, and restoring historic houses, the neighborhoods of College Park will be enhanced. The already strong community and distinctive neighborhoods will further build upon their sense of place and increase the value of College Park homes.

PURPOSE OF PATTERN BOOK

1 To provide inspiration for new construction, renovation, and addition projects.

2 To provide guidance on how to locate and scale additions correctly; use appropriate details and materials, landscaping, and sustainability tools.

3 To provide resources for materials, appropriate details, landscaping, and sustainability.

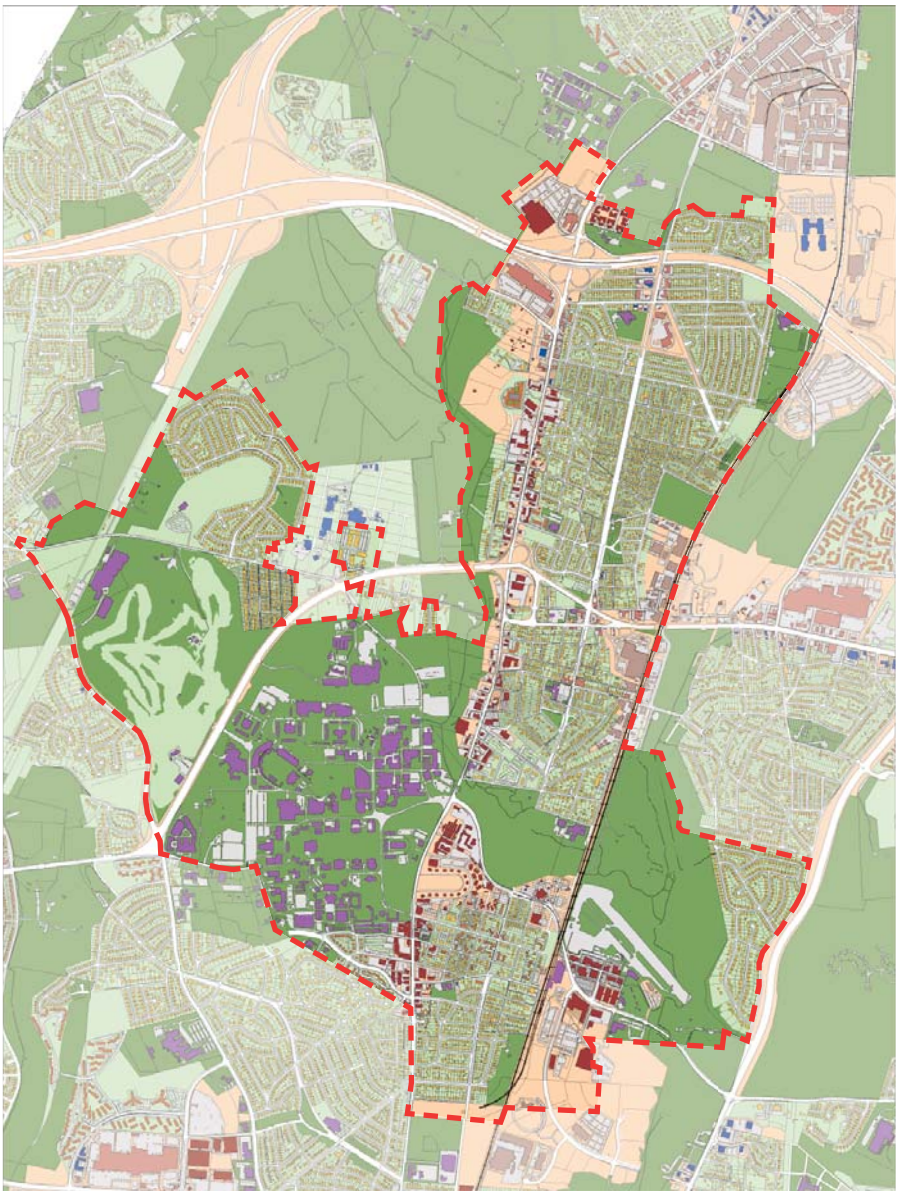


Most of College Park is located just within the I-495 beltway, northeast of the District of Columbia in Prince George's County, Maryland.

College Park's housing stock is a diverse blend of historic and contemporary architectural styles.

A public meeting and focus groups were held to determine what is working well and not so well in College Park neighborhoods. The results of these meetings guided the format and content of the Pattern Book.

Over time, smaller College Park homes have grown in size to accommodate changing demographics and family needs.

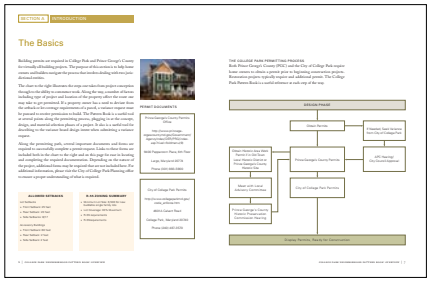


City of College Park

How to Use this Pattern Book

The Pattern Book is organized into step-by-step sections with multiple points of entry. Each section is briefly described here so that users may quickly find which sections apply to their projects.

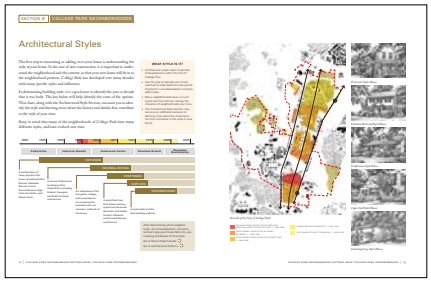
A THE BASICS / PERMITS



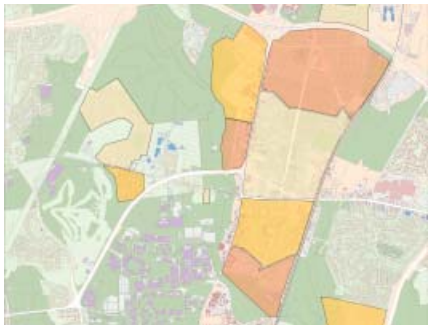
Applying for a building permit is an essential component of most projects and must be completed prior to beginning work. This section provides guidance information for the permitting process.

go to basics

B NEIGHBORHOODS



College Park is a city of diverse neighborhoods. Each neighborhood has its own essential characteristics, and typical architectural styles. This section assists users in making appropriate design decisions based on location.



go to neighborhoods

C THE COLLEGE PARK HOME PROJECT GUIDE

The public process identified several common project types. This section provides guidance for these projects as related to the full spectrum of house styles.

Renovations

Making improvements to or replacing materials in your house? This is a guide to choosing the right elements.

Additions

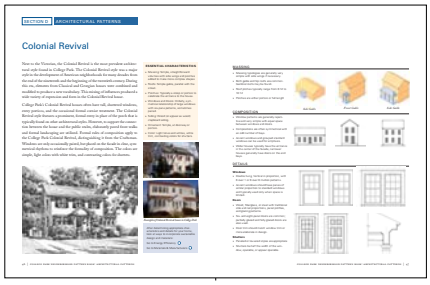
Need more living space? This section provides tips on how to best "grow" your house on your lot.

New Construction

Building a new house? This section provides tips on siting a new house in an existing neighborhood.

go to home project guide

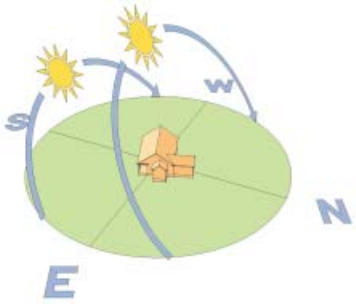
D ARCHITECTURAL STYLES

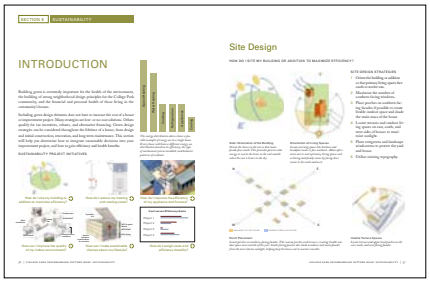


College Park grew over time to include a large "family" of architectural styles. This section traces the city's evolution to help users identify which style an individual house comes from, regardless of a it's age.

go to architectural styles

E SUSTAINABILITY





Many residents in College Park have expressed interest in optimizing houses for improved energy, air quality, and stormwater handling performance. This section provides guidance for practical ways in which home owners can save on monthly bills and improve efficiency.

go to sustainability

F CREATING A SENSE OF PLACE

The public engagement process identified initiatives that could improve the neighborhoods of College Park. This section provides guidance for the most commonly discussed initiatives.

go to creating a sense of place

G RESOURCE GUIDE

Additional information on subjects discussed in this Pattern Book can accessed through these resources.

go to reference guide

The Basics/Permits

Building permits are required in College Park and Prince George's County for virtually all building projects. The purpose of this section is to help home owners and builders navigate the requirements of two jurisdictional entities.

The chart to the right illustrates the steps from project design to construction. Along the way, a number of factors, including type of project and location of property, affect the route one may take to get permitted. When certain extraordinary situations or conditions relating to the property exist, an application for a variance may be made to the City of College Park Advisory Planning Commission. Variances may be approved if the APC finds that there are unique circumstances and the neighborhood won't be negatively impacted.

A home owner must complete a building permit application and provide copies of the site/plot plan, as well as structural and architectural drawings. Home owners should have received a copy of the site/plot plan at settlement when they purchased their property. If a site/plot plan is not available, they will need to hire a surveyor to prepare a plan of the property.

The process of designing a new house, adding on to a house, or renovating a house can be very intimidating. For tips to hiring design professionals and builders, see Section G.

THE PERMITTING PROCESS

Both Prince George's County and the City of College Park require home owners to obtain a permit prior to beginning construction projects. Restoration projects in the College Park neighborhood of Old Town or a locally-designated historic site require a Historic Area Work Permit from Prince George's County. The Old Town College Park Historic District has its own Design Guidelines Handbook.

R-55 ZONING REQUIREMENTS

- Minimum Lot Size:
  - 6,500 sf for new buildable single-family lots
  - 5,000 square feet if plot recorded prior to 11/29/49
- Lot Coverage: 30% Maximum
- Building Height: 35 feet on 2 1/2 stories
- Minimum Lot/Width frontage at front building line: 65 feet
  - If recorded prior to 4/17/28: 50 feet
  - If lot width is 50 feet: reduce side yards to 7 feet
- Minimum Required Setbacks
  - Front Setback: 25 feet
  - Rear Setback: 20 feet
  - Side Setbacks: 8/17 feet
- Corner Lot (side along street): 25 feet
- Accessory Buildings
  - Front Setback: 60 feet
  - Rear Setback: 2 feet
  - Side Setback: 2 feet

PERMIT DOCUMENTS

PRINCE GEORGE'S COUNTY DEPARTMENT OF ENVIRONMENTAL RESOURCES

www.princegeorgescountymd.gov/Government/AgencyIndex/DER/PRG/index.asp?nivel=foldmenu(9)

9400 Peppercorn Place, 6th Floor
Largo, Maryland 20774
Phone (301) 883-5900

CITY OF COLLEGE PARK DEPARTMENT OF PUBLIC SERVICES

www.collegeparkmd.gov/code_enforce.htm

4601A Calvert Road
College Park, Maryland 20740
Phone (240) 487-3570

PERMIT REQUIRED

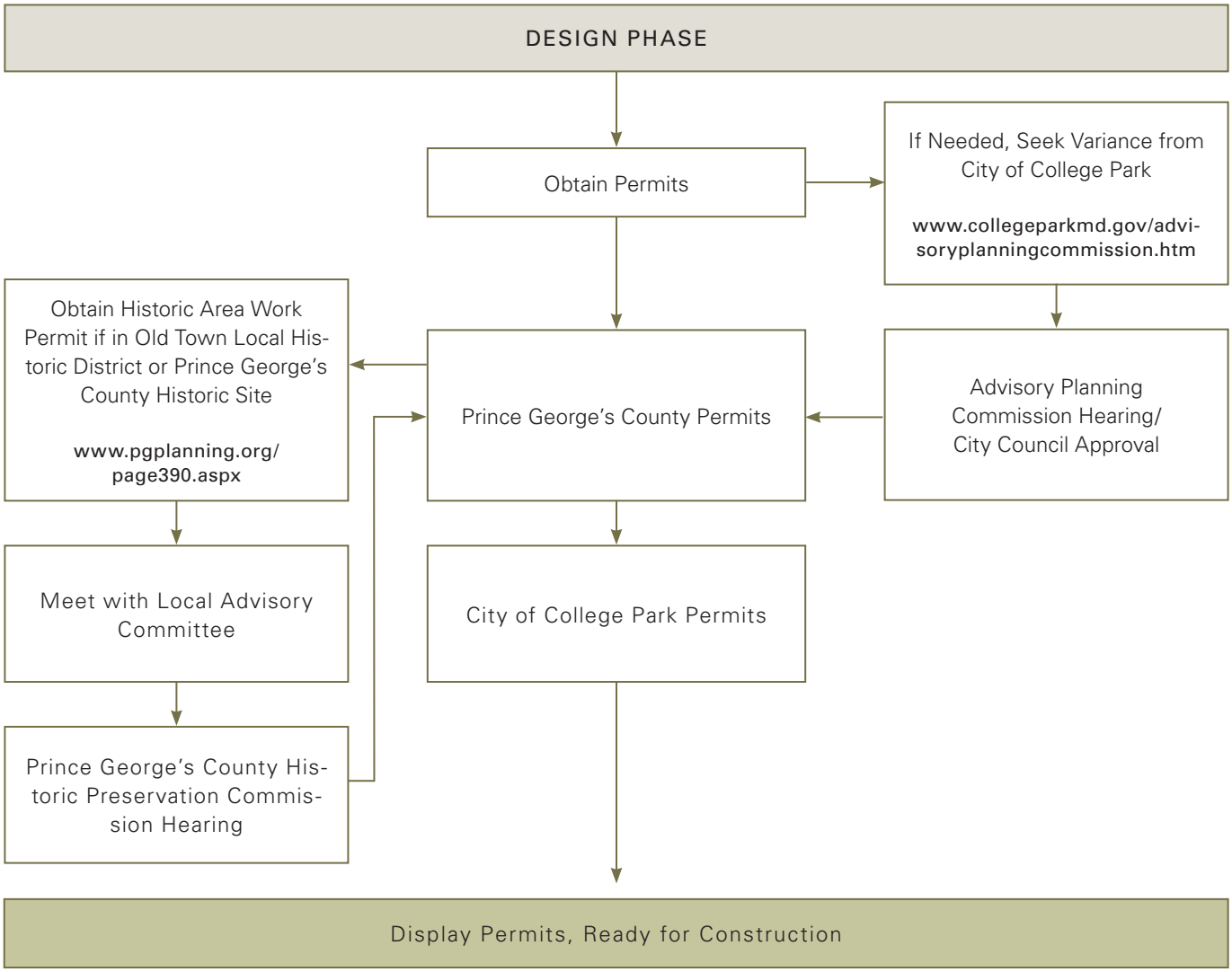
- Retaining walls higher than 2 feet
- Fences 4 feet or higher
- Decks
- Sheds more than 150 square feet enclosing a carport
- Stoops and porches
- Gazebos
- Garages and carports
- Additions and alterations

NO PERMIT REQUIRED

- Replace roof
- Install exterior siding
- Replace windows on doors
- Routine maintenance
- Patios less than 500 square feet built at existing grade

NOTE

The City of College Park does not allow the construction of new fences or retaining walls (unless necessary) in a front yard.



SECTION B

COLLEGE PARK NEIGHBORHOODS

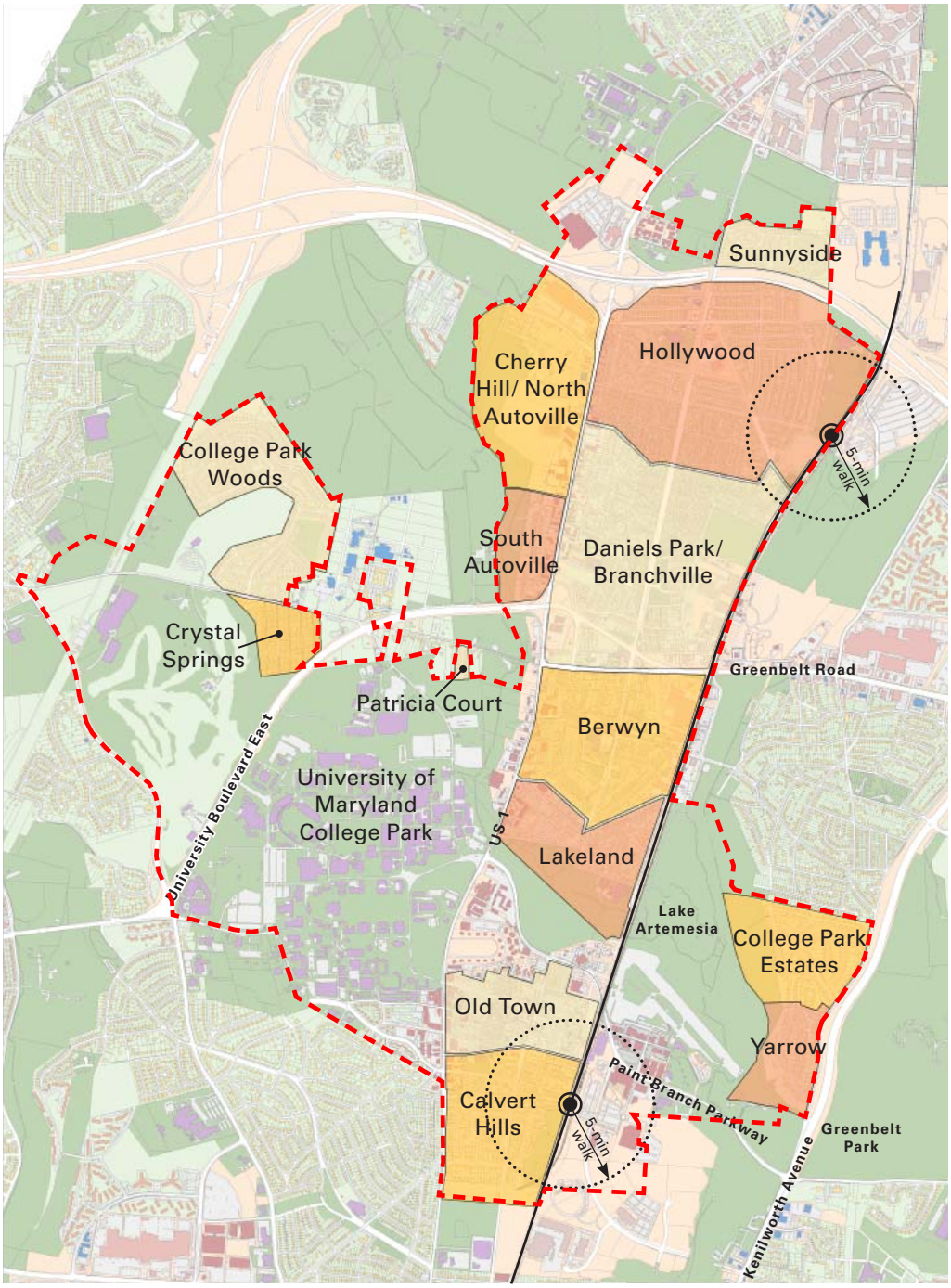
INTRODUCTION

The City of College Park grew as a collection of diverse neighborhoods, originating in Old Town and Berwyn and expanding north and south along linear transportation routes: first along Baltimore Avenue (US 1), then along the B&O Railroad and the streetcar beside Rhode Island Avenue. Post-war development was characterized by automobile-oriented development, and during the latter half of the 20th century the city expanded east, west, and north to its present day boundaries.

College Park Neighborhoods have the benefit of individual neighborhood associations that connect neighbors on common issues. These organizations help promote a sense of neighborhood identity within the larger city.

While many of the same architectural styles may be found in most neighborhoods, there are distinctions in the landscapes, lot sizes, materials, use types, and patterns of development in each neighborhood. As the City looks to the future, and home owners explore improvement and infill projects, it is important for residents to understand the characteristics that define the context of their neighborhood. This section identifies common characteristics, street and block patterns, types of uses, and other qualities of College Park neighborhoods.

Historic photos of College Park



Neighborhoods of College Park

Architectural Styles of College Park

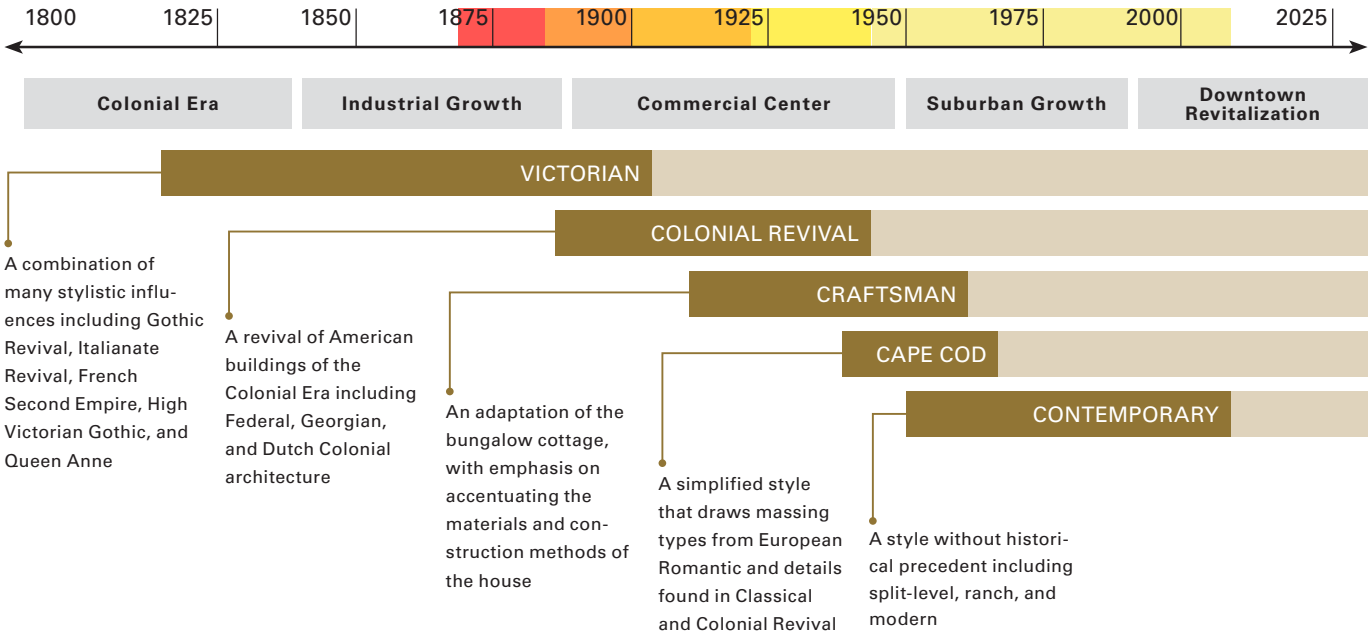
The first step to renovating or adding on to your house is understanding the style of your home. In the case of new construction, it is important to understand the neighborhood context, so that your new home or addition will fit in with the neighborhood patterns. College Park was developed over many decades with many specific styles and influences.

In determining building style, start by identifying the year or decade that the house was built. The graphic below will help identify some of the options by year. This chart, along with the Architectural Styles Section D of this Pattern Book, can help you identify the style and learn more about the history and details that contribute to the style of your house.

Many of the neighborhoods of College Park evolved over time and contain many of the architectural styles listed below.

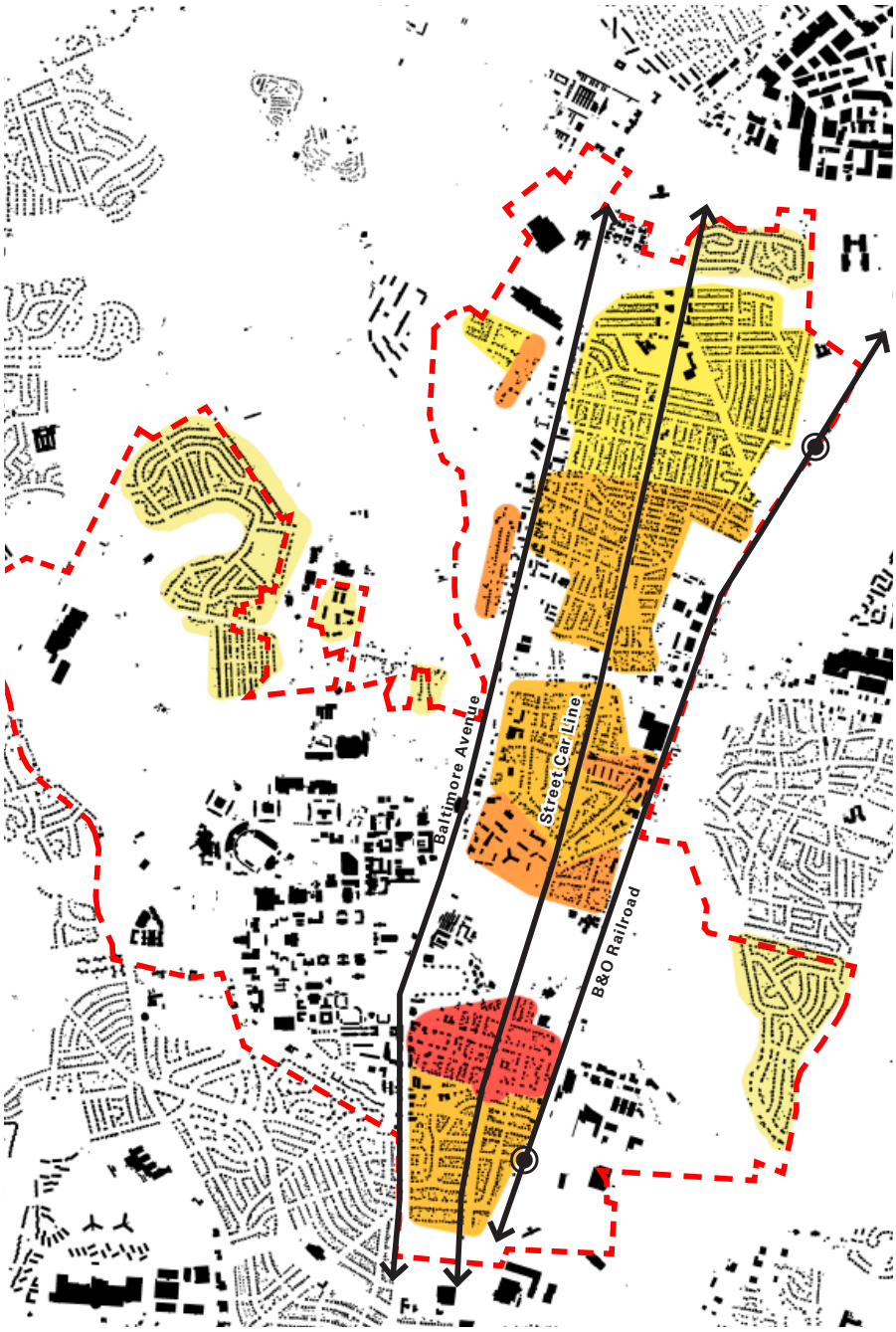
WHAT STYLE IS IT?

- Architectural styles relate to periods of development within the City of College Park.
- Use the year or decade your house was built to help determine the period in which it was developed and possible styles.
- Many neighborhoods have a mix of styles and infill can change the character of neighborhoods over time.
- The Architectural Style Section may serve as an additional resource to learn more about the characteristics that contribute to the style of your home.



After determining which neighborhood, era of development, and architectural style your house falls into, see massing and details for that style.

Go to Home Project Guide
Go to Architectural Styles



Growth of the City of College Park

ORIGINAL DEVELOPMENT ASSOCIATED WITH MARYLAND AGRICULTURAL COLLEGE, C. 1870–1880

DEVELOPMENT ASSOCIATED WITH B&O RAILROAD, C. 1890–1900

DEVELOPMENT ASSOCIATED WITH STREET CAR, C. 1900–1920

LINEAR PRE-WAR EXPANSION, C. 1920–1940

POST-WAR EAST-WEST EXPANSION, C. 1945–1970

Victorian House

Colonial Revival House

Craftsman House

Cape Cod House

Contemporary House

North and South Autoville/Cherry Hill

Map of the North Autoville neighborhood showing lot and block patterns

DEFINING CHARACTERISTICS

North Autoville

- Includes a Development District Overlay Zoning on the Route 1 Corridor.
- Future development must respect the scale and character of the neighborhoods.
- Mixed-use commercial and industrial activities on eastern edge will face east.
- New development must take advantage of trail systems and recreational amenities.

South Autoville

- Single, linear, north-south street parallel to Route 1.
- Houses are simple, set back from the street
- Trees are a foreground element to the street character.
- Houses on the West side of Autoville Drive can take advantage of the opportunity to open to the Golf Course.

Cherry Hill

- Simple massing, modest house sizes on small lots.
- Houses can open to the woods along the western and southern edge.
- Opportunities include improving access to recreational amenities such as Cherry Hill Neighborhood Park

ARCHITECTURAL STYLES

- Victorian
- Colonial Revival
- Craftsman
- Cape Cod
- Contemporary

CIVIC ORGANIZATIONS

- North College Park Citizens Association

Contemporary in North Autoville

Craftsman in North Autoville

Contemporary in South Autoville

Cape Cod in South Autoville

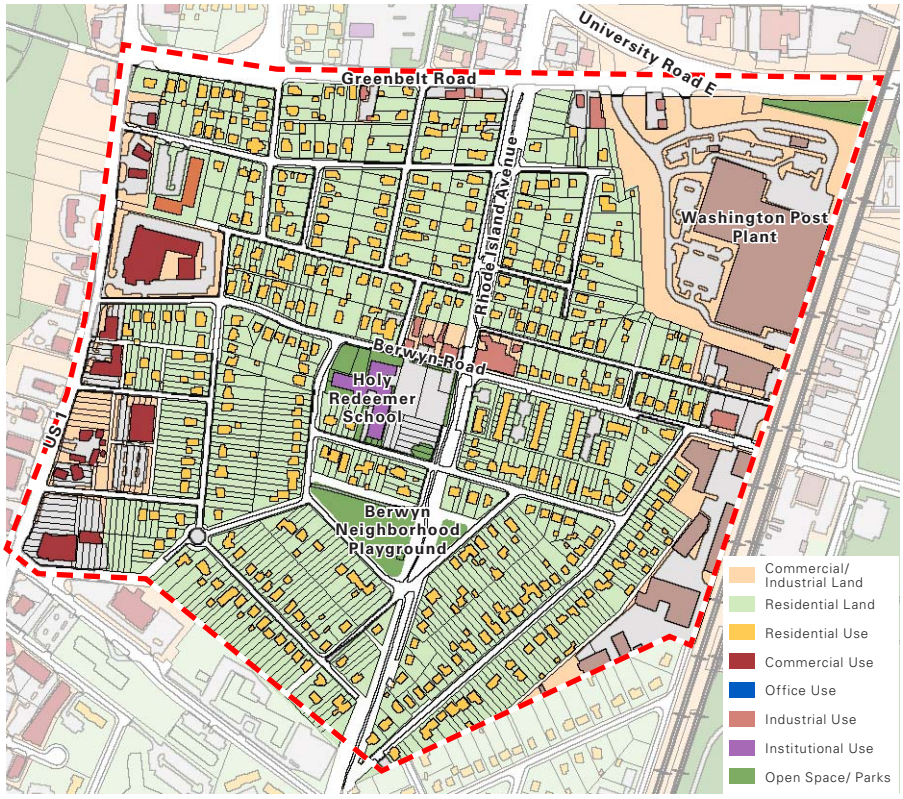
Street view of Autoville Drive

Cape Cod in Cherry Hill

Contemporary in Cherry Hill

Street view of Kiernan Road

Berwyn



Map of the Berwyn neighborhood showing lot and block patterns

View down Patuxent Avenue

DEFINING CHARACTERISTICS

- Gridded street network
- Medium-sized lots: 50'–60' in width (often paired narrow lots) and 160'–200' in depth
- Typical setbacks of 25' to houses
- Eclectic mix of housing types and sizes, including single block of 1980s townhouses
- Modest front yard setbacks, and larger rear yards.
- Opportunities include architectural restoration, improved sidewalks, and front-yard landscaping.

ARCHITECTURAL STYLES

- Victorian
- Colonial Revival
- Craftsman
- Cape Cod

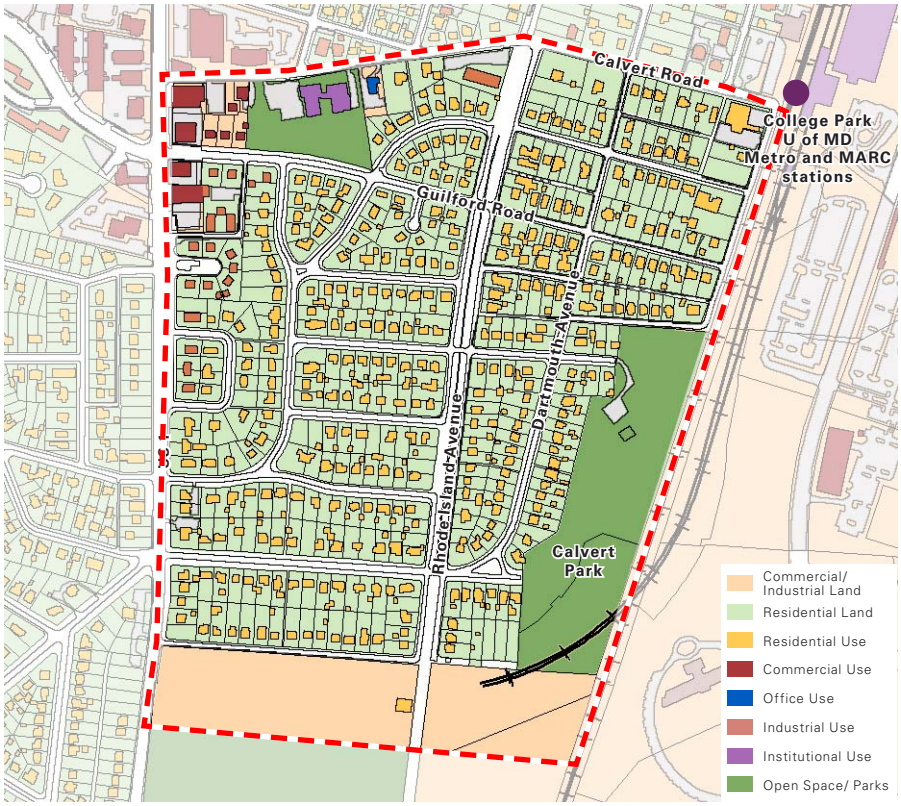
CIVIC ORGANIZATIONS

- Berwyn District Civic Association, Inc.

Craftsman in Berwyn

Victorian in Berwyn

Calvert Hills



Map of the Calvert Hills neighborhood showing lot and block patterns

DEFINING CHARACTERISTICS

- Grid-like, rectangular blocks intersect with blocks created by later curvilinear streets.
- Mature landscape and trees that shape the street environment.
- Calvert Hills Historic District is listed on National Register of Historic Places.Thus, Additions should be focused toward the back of properties to preserve the historic character of the streets.
- Opportunities include preservation of historic architecture.

ARCHITECTURAL STYLES

- Victorian
- Colonial Revival
- Craftsman
- Cape Cod

CIVIC ORGANIZATIONS

- Calvert Hills Civic Association

View down Dartmouth Avenue

Cape Cod in Calvert Hills

Craftsman in Calvert Hills

College Park Estates/Yarrow

Map of the College Park Estates/Yarrow neighborhood showing lot and block patterns

DEFINING CHARACTERISTICS

- Low-density residential development pattern on a combination of straight and curvilinear streets
- Ranch and split-level house types are prevalent, making them candidates for upward additions and transformations..
- Grade changes provide opportunities for walk-out basements and garages under the living spaces.

ARCHITECTURAL STYLES

- Colonial Revival
- Cape Cod
- Contemporary

CIVIC ORGANIZATIONS

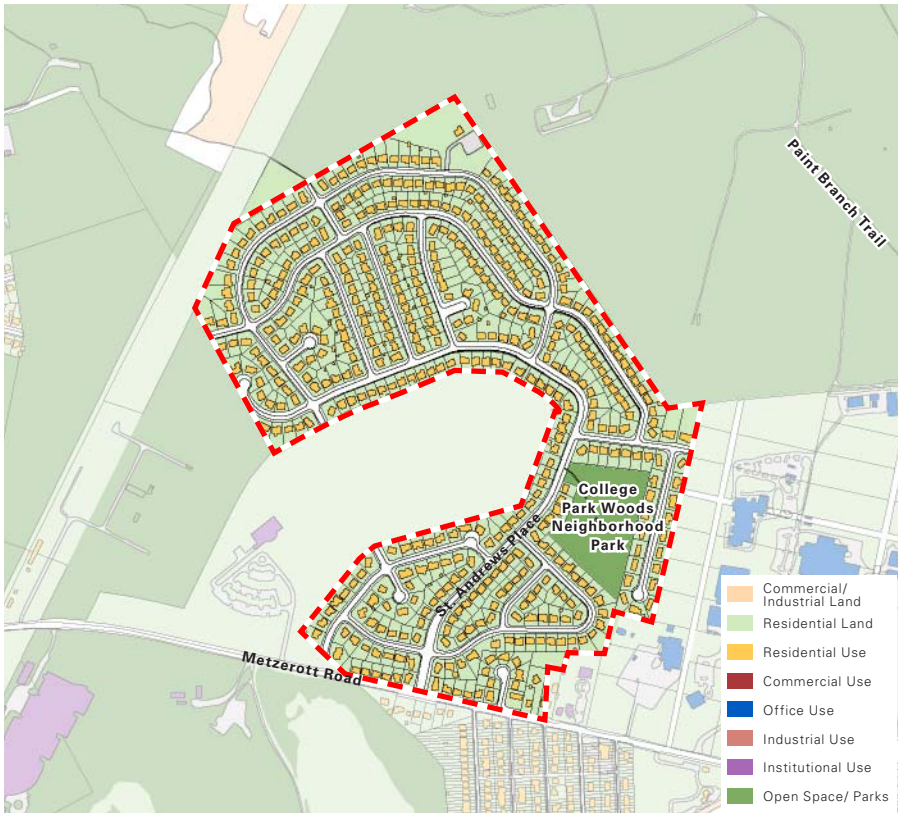
- College Park Estates Civic Association
- Yarrow Citizens Association

Colonial Revival in College Park Estates/Yarrow

Contemporary in College Park Estates/Yarrow

Contemporary in College Park Estates/Yarrow

College Park Woods



Map of the College Park Woods neighborhood showing lot and block patterns

DEFINING CHARACTERISTICS

- 1960s development of Suburban, medium to large lots, with curving street patterns
- Contemporary architecture and house types including split levels.
- Rolling hills and topography provide opportunities for walk-out basements and garages under the living spaces.

ARCHITECTURAL STYLES

- Colonial Revival
- Contemporary

CIVIC ORGANIZATIONS

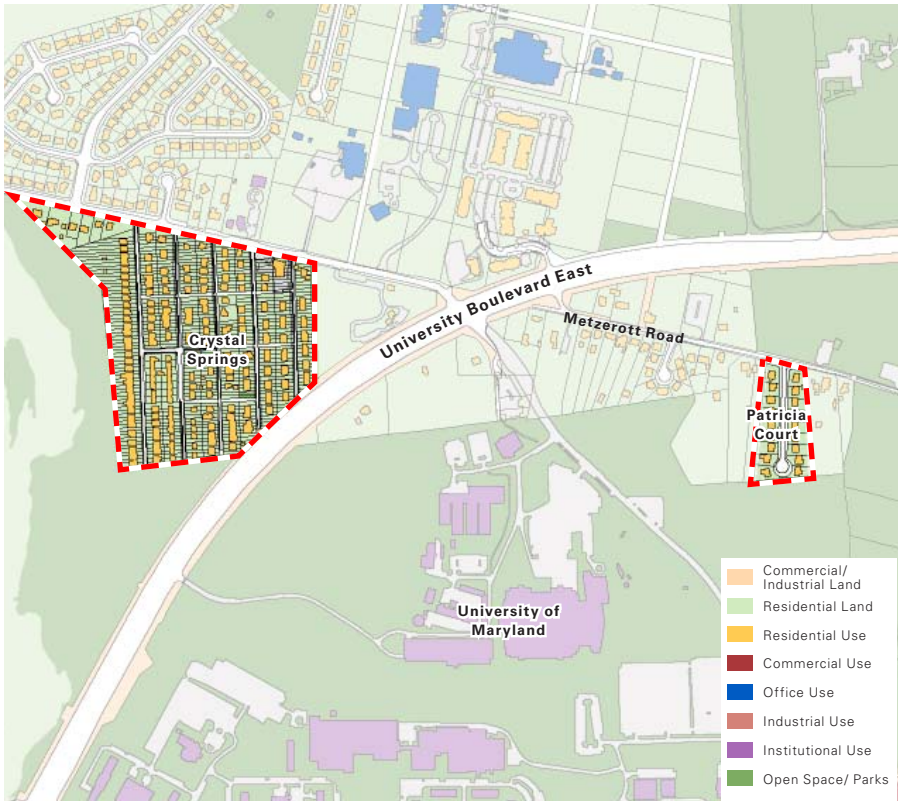
- West College Park Citizens Association

View down Saint Andrews Place

Contemporary in College Park Woods

Colonial Revival in College Park Woods

Crystal Springs/Patricia Court



Map of the Crystal Springs and Patricia Court neighborhoods showing lot and block patterns

Street View of 34th Street

DEFINING CHARACTERISTICS

Crystal Springs

- High density residential neighborhood of gridded streets with limited connectivity to each other.
- Split level and Gable Front massing types with parking in front yard.
- Opportunities include increasing front yard landscape to decrease visibility of front yard parking.

Patricia Court

- Split level and Gable Front massing types
- Feel of a residential enclave as a single street address ending in a court
- Opportunities include addressing stormwater management and flooding challenges.

ARCHITECTURAL STYLES

- Colonial Revival
- Cape Cod
- Contemporary

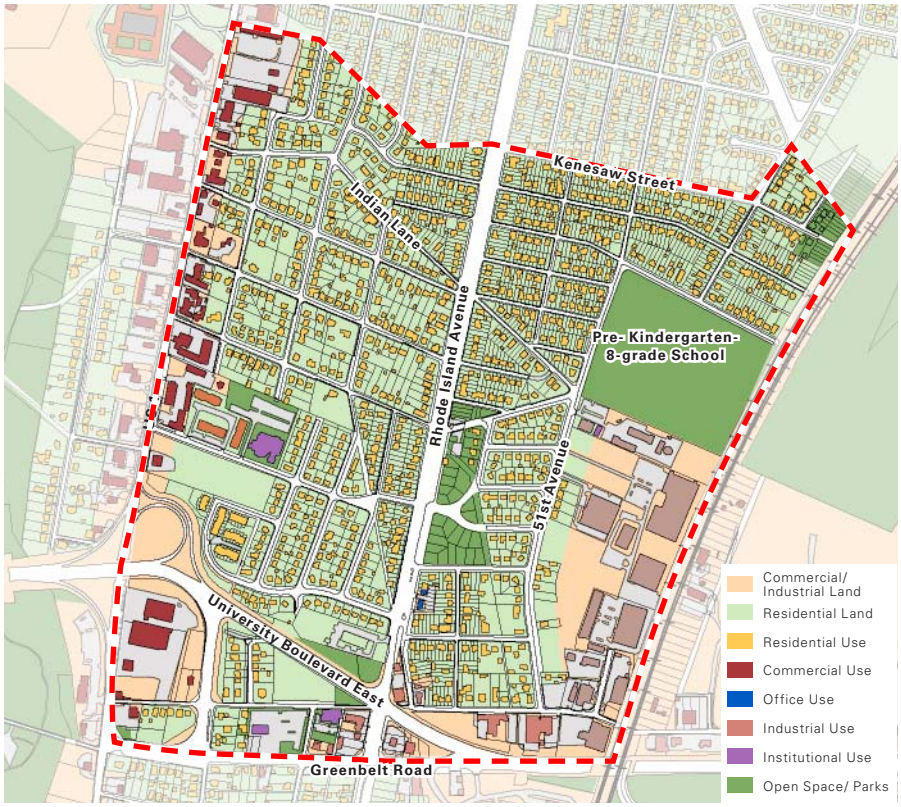
CIVIC ORGANIZATIONS

- West College Park Citizens Association

Contemporary in Crystal Springs

Contemporary in Patricia Court

Daniels Park/Branchville



Map of the Daniels Park/Branchville neighborhood showing lot and block patterns

DEFINING CHARACTERISTICS

- Tight network of blocks and streets
- Mix of housing types, including single-family, townhouse, multi-family, and senior housing
- Average to small lots 50'–60' in width and 100'–125' in depth (lots are comprised of paired 25' lots)
- Wood frame, brick, and concrete block housing
- Opportunities include restoration and additional front yard landscaping.

ARCHITECTURAL STYLES

- Victorian
- Colonial Revival
- Craftsman
- Cape Cod

CIVIC ORGANIZATIONS

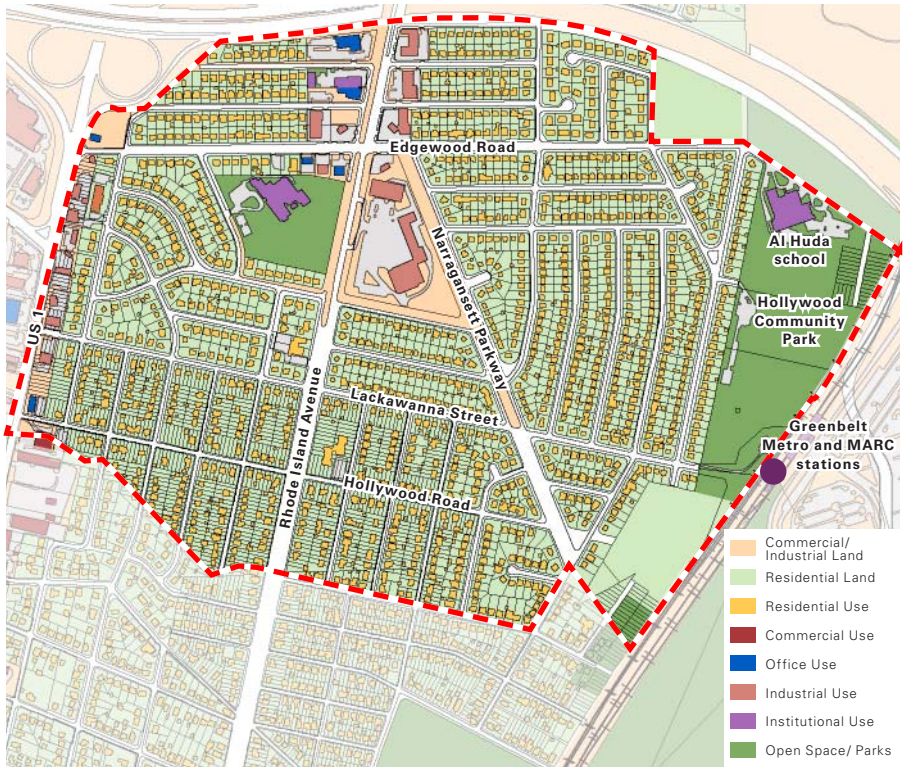
- North College Park Citizens Association

View down 49th Place

Craftsman in Daniels Park/Branchville

Victorian in Daniels Park/ Branchville

Hollywood



Map of the Hollywood neighborhood showing lot and block patterns

DEFINING CHARACTERISTICS

- Regular pattern of narrow street and rectilinear streets with sidewalks.
- Average to small lots 50'-60' in width and 100' to 125' in depth (lots are comprised of paired 25' lots)
- Houses are simple in massing and architectural expression.
- Opportunities include improves front yard landscaping and sidewalk shade.

ARCHITECTURAL STYLES

- Victorian
- Colonial Revival
- Craftsman
- Cape Cod
- Contemporary

CIVIC ORGANIZATIONS

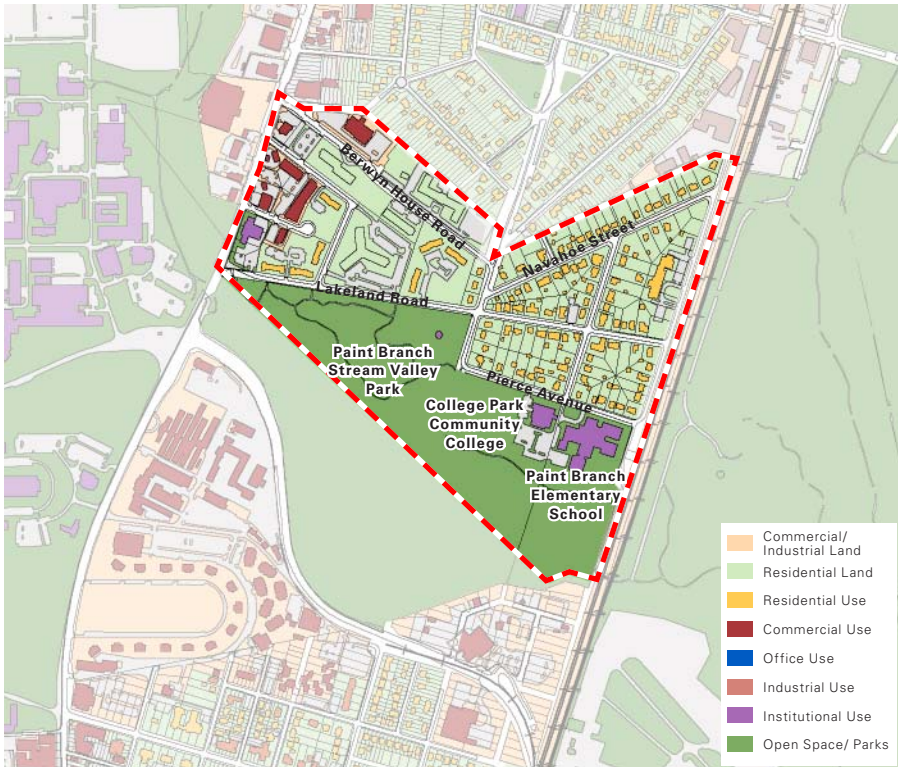
- North College Park Citizens Association

View down Lackawanna Street

Cape Cod in Hollywood

Colonial Revival in Hollywood

Lakeland



Map of the Lakeland neighborhood showing lot and block patterns

View down Lakeland Road

DEFINING CHARACTERISTICS

- Diverse lot shapes and sizes
- Mix of uses including commercial, single-family, and multi-family units
- Mix of architectural styles and massing.
- Opportunities include increased exposure of houses to Paint Branch Stream Valley Park.

ARCHITECTURAL STYLES

- Colonial Revival
- Cape Cod
- Contemporary

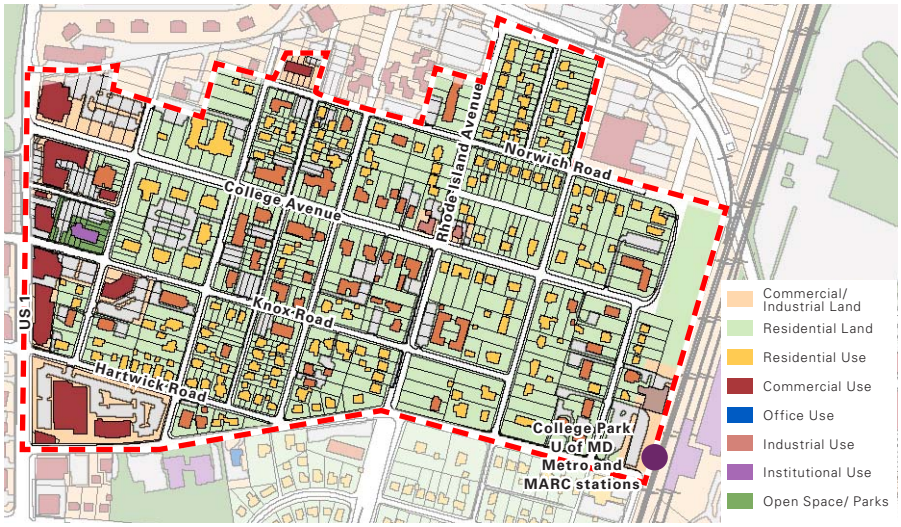
CIVIC ORGANIZATIONS

- Lakeland Civic Association

Colonial Revival in Lakeland

Cape Cod in Lakeland

Old Town



Map of the Old Town neighborhood showing lot and block patterns

View down Knox Road

DEFINING CHARACTERISTICS

- Narrow, gridded streets with pattern of larger, combined lots for multi-family units, fraternity and sorority houses, and commercial buildings
- Lot sizes range from 50' wide by 90'-200' deep. Some small lots (25 x 100 feet) have been combined to make 50 x 100 buildings sites for single-family detached houses.
- Prince George's County designated Historic District and a National Register of Historic Places designation is pending.
- Opportunities include restoration and historic preservation.

ARCHITECTURAL STYLES

- Victorian
- Colonial Revival
- Craftsman
- Cape Cod
- Contemporary

CIVIC ORGANIZATIONS

- Old Town Civic Association

NOTE

There is a Old Town College Park Historic District Design Guidelines Handbook

Cape Cod in Old Town

Colonial Revival in Old Town

Craftsman in Old Town

Sunnyside

Map of the Sunnyside neighborhood showing lot and block patterns

View down 52nd Avenue

Contemporary in Sunnyside

Contemporary in Sunnyside

DEFINING CHARACTERISTICS

- L-shaped and front gable, split-level massing types
- Moderately sized lots
- Low density, curvilinear street patterns of moderately-sized lots
- L-shaped and front gable, split-level massing types
- Opportunities include improved connectivity between living space and the street and additional front-yard landscaping.

ARCHITECTURAL STYLES

- Colonial Revival
- Contemporary

CIVIC ORGANIZATIONS

- North College Park Citizens Association

SECTION C

HOME PROJECT GUIDE

INTRODUCTION

The information in this section is intended to provide guidelines for home projects, such as repairs, renovation, additions, and alterations of new construction. In the process of choosing the work for your house, it is important to look at your house comprehensively.

The examples in the following pages can be used as a tool to determine the scale and project type. All material is presented in general terms and is not specific to building style. Once you have determined your scale and project type, you can move on to the appropriate style sections of this document.

In the case of renovation projects, there has been considerable research into improving the livability, energy efficiency, and health of a home. When adding on to a home, there are particular considerations to keep in mind with regard to creating a neighborly house according to the size and scale of other homes in the neighborhood. Recommendations of how and where additions should occur are provided. New homes, including garages for new and existing houses, should be considered in context to the structures around them. This section contains many strong principles for building great neighborhoods.

RENOVATIONS AND RESTORATIONS

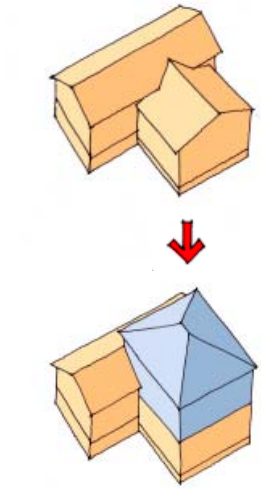
All homes require consistent maintenance, and in some cases, substantial repair projects are necessary to improve the performance and longevity of a home. Some homes that were built many decades ago do not serve the needs of modern life, and the livability may be improved through simple modifications to the interior.

ADDITIONS AND ALTERATIONS

The most common means of increasing living space is through the addition of a side or front wing, enclosing a carport, building a garage, adding a porch or placing an ancillary structure such as a shed. All of these may have an effect on the appearance of a house. For that reason it is critical for home owners, architects, and builders to understand the appropriate means of enlarging a house. This will ensure a well-composed facade, the best use of land, and the maximization of an investment.

NEW HOME CONSTRUCTION

Infill development happens on a lot-by-lot basis in College Park. The massing, frontage, and scale of a new structure should complement its neighbors and reinforce College Park's sense of place.



Renovations and Restorations

Improvements to a home can range in scale from routine maintenance to historic preservation of the original design of the house. This section provides direction for improving the condition, appearance, and function of a College Park home. These options can enhancing the quality and value of your house. However, a poorly executed renovation can turn even the most beautiful house into an eyesore regardless of the nature, extent, or major expenditure involved. Similarly, an inexpensive, but well-detailed modification to an existing house could add significant value.

The key to effective renovating lies in understanding the appropriate design elements, massing, and materials which create the architecture of your house.

SCOPE

Before starting, it's important to determine the scope of your project. Is it cosmetic to help you add character and value? Or based on a need, such as additional living or parking space? Or is your purpose to repair old or damaged elements? By answering some simple questions about the scope of your project, the age of your house and its architectural style, you'll be better able to determine whether your project is a weekend project for you or a major building project requiring a professional and a building permit.

Renovations may include window replacement, a new front door, front porch restoration, roof and gutter replacement, brick repointing and repair, new paint, new siding, or the replacement of aged or damaged siding. Larger renovations may include simple, small-scale additions including bay windows and dormers.

RENOVATIONS

In the case of renovating a house, there are opportunities to improve the exterior building envelope performance, including stopping the infiltration of water. In addition to the typical tasks identified in this section, consider using sustainable materials and selections in the Resource Guide section of this Pattern Book.

It may be worth considering the layout of the interior of your house. Across the country, a growing trend in renovation is to modify the interior of houses to improve the functionality and use of storage for greater efficiency. Retrofitting a house for accessibility is a worthwhile investment for resale value and for creating a house that can accommodate aging-in-place.

RENOVATION

Typical Tasks

- Window and door maintenance or replacement
- Replacement of rotted wood
- Porch renovation
- Roof and gutter replacement
- Brick repointing and repair
- New paint
- New siding or replacement of damaged siding

RESTORATION

Typical Tasks

- Research on site and local resources such as photo archives, etc.
- Determine what is not original.
- Uncover historic materials and restore them to the original detail.
- Select and craft new products to replicate original.

Resources

- See Section G: Resource Guide

Standards

- U.S. Secretary of the Interior's Standards and Guidelines on Historic Preservation: www.nps.gov/history/local-law/arch_stnds_0.htm

Typical renovations involve the replacement of systems and elements of the house. Choose stylistically appropriate details and improve energy efficiency.

Go to Architectural Styles
Go to Energy Efficiency
Got to Accessibility and Visitability

After you have a sense of the size and scope of your project, consider the age of your house as referenced in Section B. Knowing the age of your house not only helps you understand the status of the building's structure, it also helps you decide whether the investments you're contemplating are worthwhile.

RESTORATION

Restoration to the original historic condition, can be a very challenging, yet rewarding task. Older homes, particularly homes over fifty years old, may be candidates for local grants and/or federal tax breaks. Detailed research is a critical effort in planning your restoration project. To uncover the original design and construction of your house, it is important to review historic photos and drawings and inspect your home to make a restoration plan.

1. ROOFS

Maintenance

» Maintain and clean out gutters, downspouts, and perimeter drains

» If original slate or tile roof, your roof can be maintained and restored by a competent roofer.

Replacement

» Research your house history to discover what the original roof was.

» Consider higher-grade, sustainable materials if budget permits.

» If roof was slate or tile and is now composition shingle, consider restoring the roof to its original material if budget permits.

» If budget does not permit these materials, use new synthetic slate and tile products that approximate the original appearance.

2. PORCHES

» Restore original trim, railings, balustrades, and columns.

» For renovations, examine houses similar to yours in the neighborhood, which are an important source of information and serve as a guide for detailing and material choices.

3. WINDOWS

Maintenance

» Keep your windows painted and operational by checking them every season.

» Historic windows can be restored to operation with simple steps.

Replacement

» Consider restoration of the original windows

» If they are not salvageable, consider new windows that closely match the originals, or the styles and recommendations in this Pattern Book

4. SIDING AND TRIM

Maintenance

» Check the condition of your paint and verify that it is providing adequate protection from water intrusion.

» Verify that all seams are caulked and sealed.

Replacement

» If your siding is not original, survey for what is underneath. You may discover the original material of your house is brick or stone that could be restored.

» If your siding is the original, consider restoring it or matching the new siding, details, and colors upon the architectural styles of College Park.

Additions and Alterations

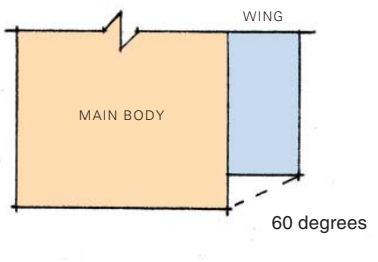
The most common means of increasing living space is through an addition to a home. When considering an addition, it is critical to understand local regulations and identify the most appropriate strategy to enlarge your house, to ensure a well-composed facade, the best use of your land, and to maximize the value of your investment.

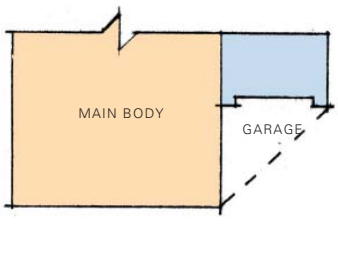
Additions that affect the front and sides of a house should take particular care in design, as they can make an impact on the public realm of a neighborhood. Well-proportioned porches and doorways can serve as a "gift to the street" and activate the neighborhood. A porch can also provide an additional living space for a home in the spring, summer, and fall.

In College Park, lot coverage regulations may determine the scope, scale, or location of an addition to a property. A thorough study of your current lot coverage, to evaluate your potential, should be the first step when considering an addition.

This section shows three alternatives and variations for sample houses and provides diagrams for how a house can be modified.

CONCEPTUAL SETBACK DIAGRAMS FOR SIDE ADDITIONS





	ADDITION TYPES	I HAVE A ONE-STORY HOUSE	I HAVE A TWO-STORY HOUSE	NOTES FOR CONSIDERATION
TOP	Pop-Up Roof	✓	✓	These additions are very costly and complicated. However, they do not increase impermeable lot coverage.
	Add Floor	✓ See Example B	✗ Not Recommended	
BACK	One-Story Addition	✓ See Example A	✓ See Example A	These additions do not have a large impact on the neighborhood.
	Two-Story Addition	✗ Not Recommended	✓	
	Porch	✓	✓	This is an easy and economical way to add a three-season room to your house.
SIDE	One-Story Addition/ Garage	✓	✓ See Example C	Be careful not to overwhelm the existing main body of the house.
	Two-Story Addition	✗ Not Recommended	✓ See Example C	
	Porch	✓	✓	This is an easy and economical way to add a three-season room to your house.
FRONT	One-Story Addition	✓ See Example A	✓	These additions have the greatest effect on the neighborhood.
	Two-Story Addition	✓ See Example A	✓	
	Porch	✓ See Example C	✓ See Example C	This can add curb appeal and improve the neighborhood.

✓ RECOMMENDED ADDITION TYPE, SEE EXAMPLES FOR MORE DETAIL ✗ NOT A RECOMMENDED ADDITION TYPE

EXAMPLE A: FRONT AND REAR ADDITION

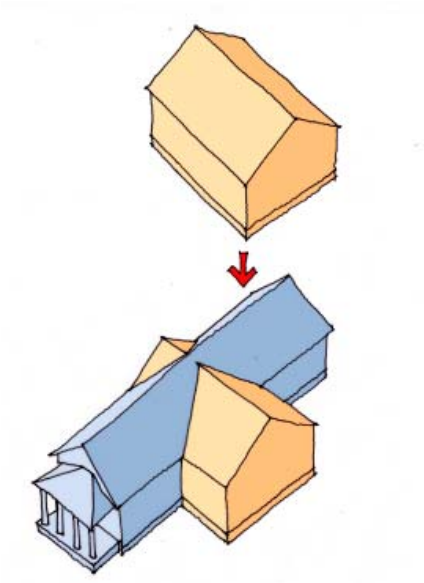
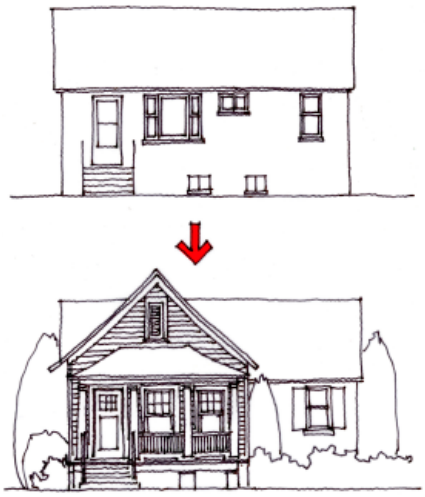


Diagram showing front and back additions



Front elevation showing impact of addition

Houses with simple massing and deep enough front setbacks can receive front and potentially, rear additions. Additions to the front of the house have the greatest impact on the neighborhood and can greatly enhance the curb appeal of a house. Adding porches to the front of the house can be an easy and economical way to add a three-season room to a house.

In this case, the house has no particular stylistic reference. The sketch represents an addition of Arts & Crafts.

EXAMPLE B: UPPER STORY ADDITION

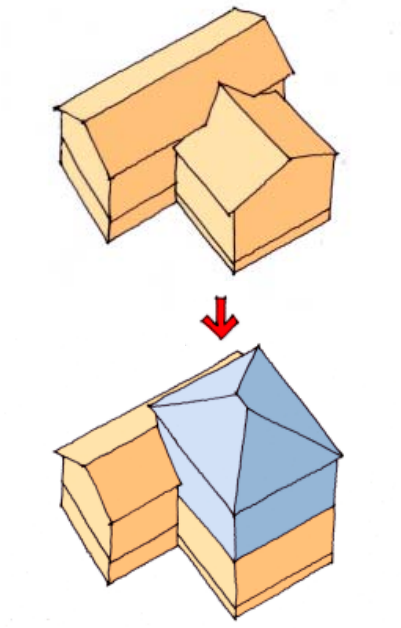
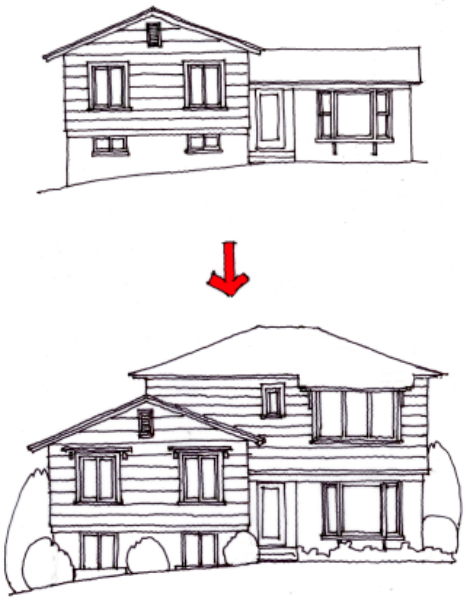


Diagram showing second story addition

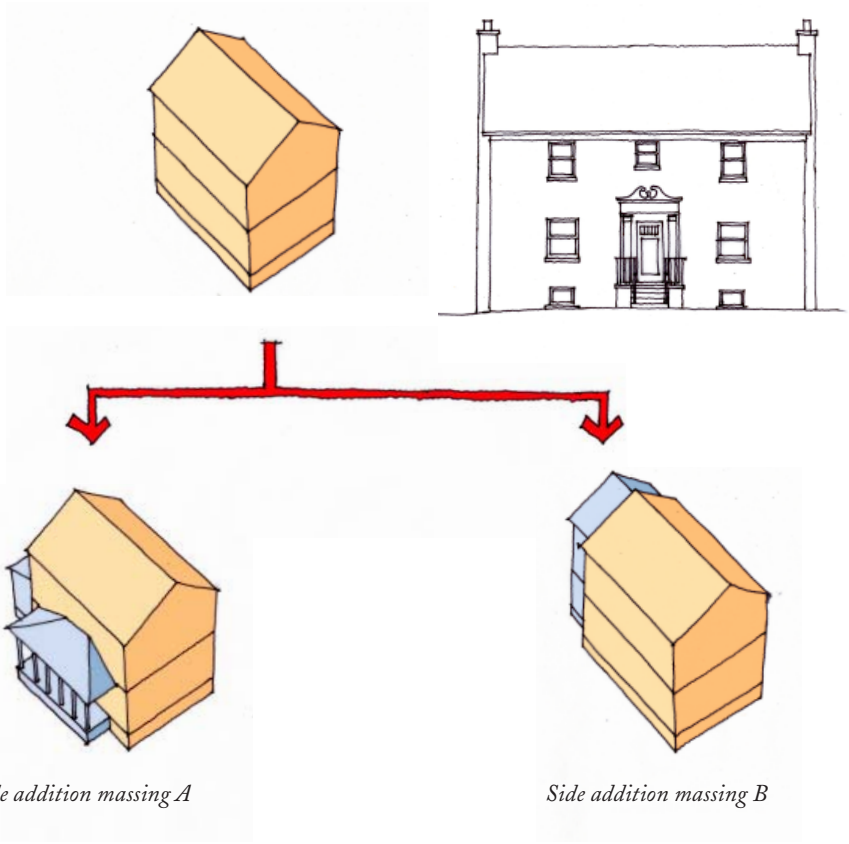


Front elevation showing impact of addition

Single story and one and a half story houses can receive upper-story additions to increase living area. These types of additions can be costly and complicated, but they do not increase impermeable lot coverage. Care should be taken to design the appropriate height and massing for the upper story addition.

The example at the left shows a contemporary house with alterations consistent with the style.

EXAMPLE C: SIDE ADDITION



Side addition massing A

Side addition massing B

Many houses can accept single- or multiple-story side wings to increase the living area of the house. When designing side additions, it is important to make sure that the massing of the addition is properly set back and does not overwhelm the main body of the house.

Elevation alternative A

Elevation alternative B

The massing and composition of additions should have a relationship to the massing and style of the main body of the house. Simple decisions about placement and orientation can also affect energy efficiency.

Go to Massing and Composition in Architectural Styles

Go to Site Design in Sustainability

GARAGE PLACEMENT

The design of garages and driveways greatly affects the overall character of a residential lot. These elements strike the balance between the landscaping of an individual house and its contribution to the overall character of the street. When designed correctly, these elements can provide unity to the site composition.

Budget and Priority

The principal issues with garages are the size, location, and detailing for the doors, as well as garage additions that often overwhelm the scale and character of the house.

For houses on corner lots, the garage should be located in the rear yard, turned to face the side street, and set back to match the house setback. It is preferable to locate the garage so that the parking area in front of the garage is at least 25-feet inboard of the side street property line to prevent parked cars from encroaching into the public sidewalk. Single-width garage doors up to 8-feet wide are recommended. Large double-width doors are discouraged because they are not in keeping with the scale of houses.

If an attached garage is preferred, a one-car garage is recommended. This garage must be placed behind a line established at the intersection of a 45-degree line (cast on the ground plane from the front corner of the house) and the side setback or driveway line. This proportion creates garages that do not overburden the main body of the house. Attached two-car garage additions often appear wider than the house, which is not recommended (this is illustrated in "Additions").

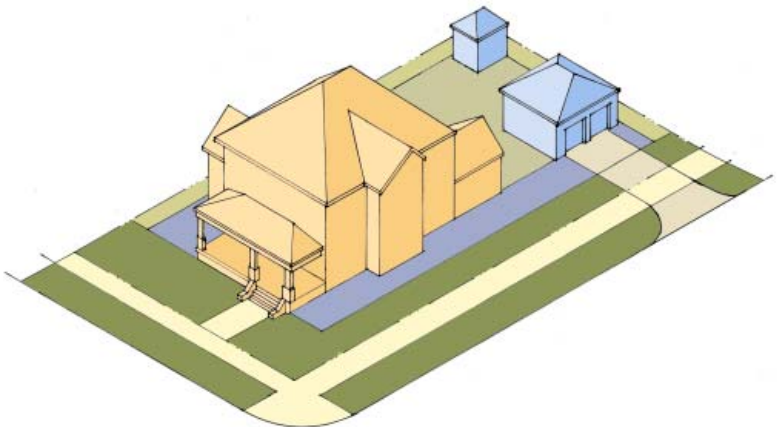
Attached one-car garages should be treated as wing additions in terms of setback from the front of the house (45-degree rule noted above). Their architectural character should match that of the house.

Driveways

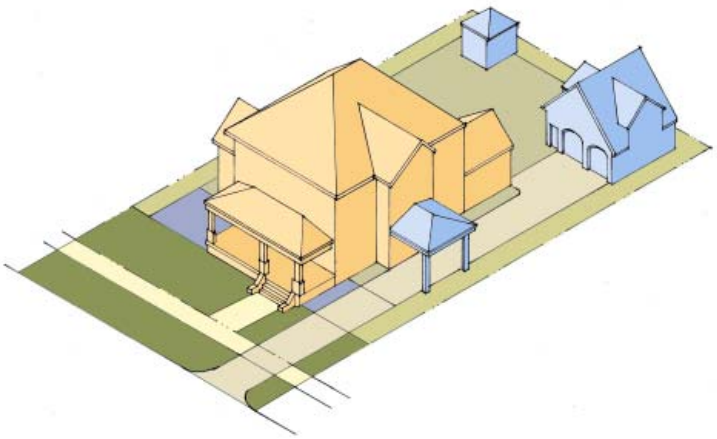
Driveways should be seen as landscape elements within the yard that enhance the beauty and setting of the house and garage, if present. As such, driveways should not be dominant elements on house lots. Whenever possible, porous, natural materials or special materials (stone, brick, crushed stone, or pebbles), should be used to blend in driveways with the surrounding yard or garden space. In particular, using large expanses of cement as a driveway material tends to detract from the character of the house. If cement is used, it should only be poured for the tire tracks, or for a single driveway that slips past the house as unnoticeable as possible.

RECOMMENDED GARAGE PLACEMENT STANDARDS

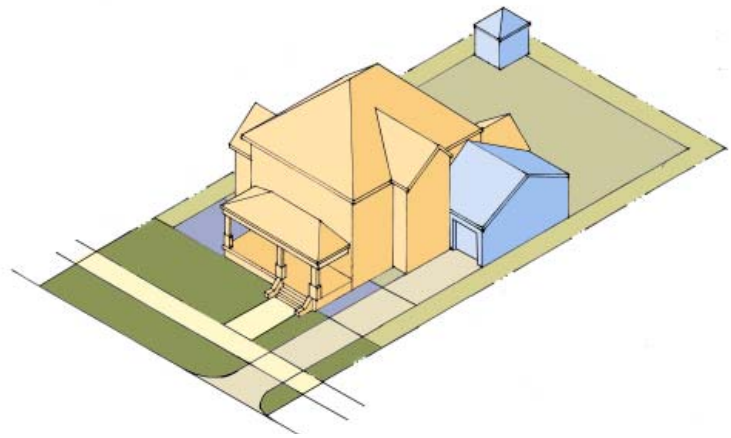
- Detached Garages: Locate the garage at the back of the lot.
- Corner Lots: Face the garage to the side street
- Attached garages: One-car garage (follow placement guidelines for additions in this section)
- Single-width garage doors are recommended in all cases.



Ancillary structures include storage sheds and detached garages on a corner lot



A carport and a detached garage shown on a mid-block lot



An attached garage and storage shed on a mid-block lot

Examples of ancillary structures such as storage sheds and detached garages

New houses should be consistent with styles found in the neighborhood. Garages should have a relationship to the massing and style of the main house. Take advantage of solar and wind orientation when siting new structures.

Go to Architectural Styles

Go to Site Design in Sustainability

New Home Construction

SITING AND BUILDING PLACEMENT

This section recommends placement standards for nesting new construction, including houses, in existing neighborhoods. These placement standards are based on strong principles of great neighborhood design. These standards should be considered in conjunction with strong principles of sustainability provided in this Pattern Book. Many of the considerations presented here also apply to the design and construction of additions to the front or side of a house.

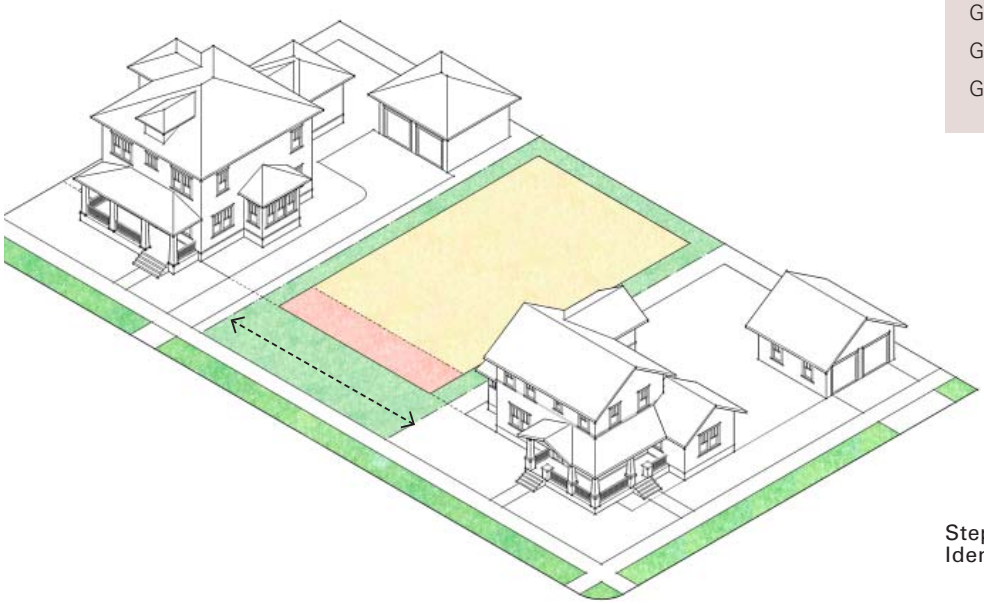
In the design of new construction, it is essential to establish how a new house will fit into an existing neighborhood. The placement of new houses and garages on their individual lots should be based on the patterns of adjacent properties. In traditional neighborhoods, this can be best done by measuring the setbacks of the buildings on both sides of the street in the block in which the house is to be located.

RECOMMENDED HOUSE PLACEMENT STANDARDS

- Setbacks: Identify the setbacks of neighbors.
- Parking: Locate parking behind the front facade.
- House Placement: Align the front of the house or the porch with neighboring houses and/or porches.
- Front Yard: Develop landscape that fits into the neighborhood pattern.

New houses should be consistent with an historical style found in the neighborhood. Garages should have a relationship to the massing and style of the main house. Take advantage of solar and wind orientation when siting new structures.

Go to Garage Placement
Go to Architectural Styles
Go to Site Design in Sustainability



Step 1:
Identify Setbacks

Determine the dimensions of the site and check the set-backs of adjacent properties. Identify the set-back lines based on the context and identify those facades which will be facing the public right of way. Return to section A of this Pattern Book to verify your lot setback requirements.

Step 2:
Parking

Whenever possible, provide parking spaces behind the front facade zone of the house to maintain the character of the neighborhood. See the preceding pages for details on the placement of garages.

Step 3:
House and Porch Placement

Place the house with the front facade on the set-back line and the porch or stoop within the set-back area. This is a principle for good neighborhood design. This should be balanced with strong principles for appropriate solar and wind orientation. See Sustainability Section E for more information.

Step 4:
Front Yard Landscaping

Develop the front walk and front yard landscape. See Sustainability Section E for more detail on plant types and selections.

HOUSE PLACEMENT

Houses that adhere to the traditional neighborhood patterns add to the quality of the public realm and encourage the safety and vitality of a neighborhood.

SECTION D ARCHITECTURAL STYLES

INTRODUCTION

The City of College Park developed between the latter half of the 19th century and the latter half of the 20th century. The architectural vocabularies and styles that are present in the neighborhoods reflect these periods. The styles of the 19th and early 20th centuries were actually adapted by local builders through the use of pattern books and later catalog of house plans. Adapting house plans to local climate and local requirements made the College Park architectural styles distinctive.

This section will help you and your builder understand four defined, historic architectural styles that exist in College Park Neighborhoods: Victorian, Colonial Revival, Craftsman, and Cape Cod. The pages in this section describe each style in detail and illustrate key elements of each.

Many College Park neighborhoods developed during the post-war suburban growth period and contain houses that express a more contemporary style. Stylistically, the contemporary style is often a simplified version of one of the historic styles present in the area. Many of the contemporary houses in College Park relate to multiple styles and influences. Thus, this style section is intended to help homeowners renovate their houses toward strong principles of sustainability and neighborhood design that are embedded in the local legacy of historic styles. In some cases, a contemporary house may be converted to another style with the appropriate massing modifications.

STYLE NOTES

- Refer to style identification tools in Section B to assist in identifying the style of a house.
- Building massing and original windows are helpful tools when determining the correct building style.
- Read the descriptions of each style, paying attention to essential characteristics.
- When making home improvements such as renovations or alterations, consider massing additions and details consistent with the source style.

Victorian House

Craftsman House

VICTORIAN

A combination of many stylistic influences including Gothic Revival, Italianate Revival, French Second Empire, High Victorian Gothic, and Queen Anne

COLONIAL REVIVAL

A revival of American buildings of the Colonial Era including Federal, Georgian, and Dutch Colonial architecture

CRAFTSMAN

An adaptation of the bungalow cottage, with emphasis on accentuating the materials and construction methods of the house

CAPE COD

A simplified style that draws massing types from European Romantic and details found in Classical and Colonial Revival architecture

CONTEMPORARY

A style without historical precedent including split-level, ranch and modern

Victorian

The Victorian Style was the predominant house style at the height of College Park development. This was a common style for building American neighborhoods prior to the turn of the twentieth century. It was based on simple, farmhouse forms found throughout the agricultural lands and farmsteads around Washington, D.C. and large, ornate family houses found in the Pattern Books published by Andrew Jackson Downing. These earlier pattern books made it easier for the builders to replicate the high-style of the era and populate whole towns with predominant architectural vocabularies. In College Park, there are many fine examples of the Victorian style, with subtle variations in massing and more creative porch details, special moldings, and ornamentation.

Victorian is a style with broad inheritance and derivative styles. In College Park, the style is most akin to simpler versions of Queen Anne, with restrained ornament rather then the ornate, national examples that are often referred to as 'gingerbread.' The College Park examples are often monochromatic, light colors and whites, creating a strong contrast to the surrounding landscape.

ESSENTIAL CHARACTERISTICS

- Massing: Simple, straightforward volumes with side wings and wrap porches added to make more complex shapes.
- Roofs: Steeply pitched, often a front gable facing the street
- Porches: Face street or side yard, detailed with delicate columns and narrow balusters
- Windows and Doors: Narrow and vertical proportioned
- Siding: Wood (or appear as wood) clapboard siding. Shingles are common in gables.
- Ornament: Simple, cut wood design, often found on the friezeboard
- Color: Light tones and whites

Examples of Victorian houses in College Park

After determining appropriate characteristics and details for your home, look at ways to incorporate sustainable design and materials:

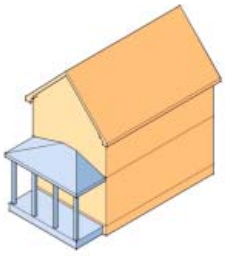
Go to Energy Efficiency in Sustainability

Go to Materials & Manufacturers in Resource Guide

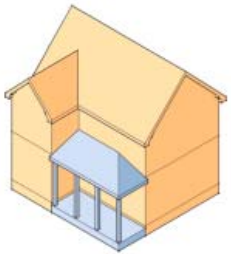
MASSING

- Hipped or side-gabled rectangular volume, often with a dormer flush to the front facade
- Roof pitch is 8:10
- Special elements such as dormers or cross gables are 12:12
- One-story shed or hip front porches full length of the main body

Side Gable



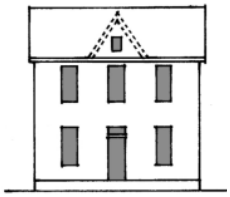
Front Gable

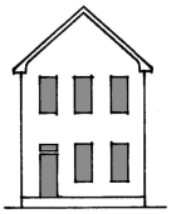


L-Shape

COMPOSITION

- Characterized by a symmetrical and balanced placement of doors and windows
- Same window design throughout, with the exception of special windows
- Often, the first-floor windows are larger than the second floor.
- Align door head with window heads
- Entrance doors are located in corner of narrow houses and the center of wide houses.

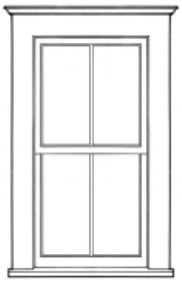


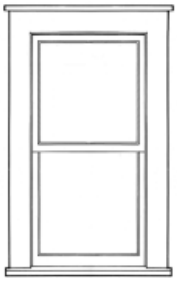


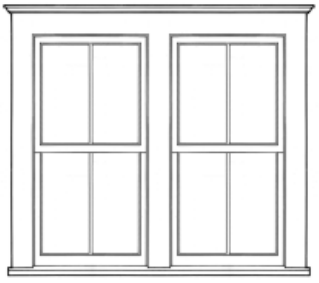
DETAILS

Windows

- Double-hung windows typically have patterns of 1 over 1, 2 over 2
- Windows may have decorative caps
- Accent windows should have panes of similar proportion to standard windows and are typically used only when space is limited.

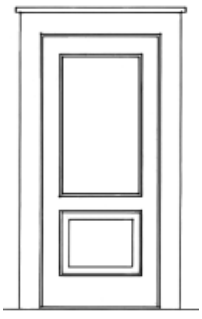


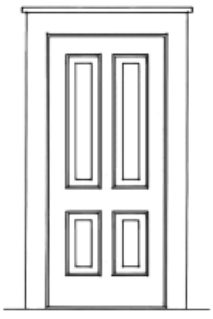




Doors

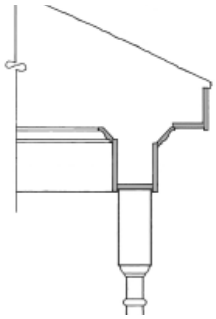
- Wood, fiberglass, or steel with traditional stile and rail proportions, panel profiles, and glazing patterns
- Four-panel doors are common, partially glazed doors are also used
- Door trim should match window trim





Shutters

- Paneled or louvered styles are appropriate
- Half the width of the window; operable, or appear operable



Colonial Revival

Next to the Victorian, the Colonial Revival is the most prevalent architectural style found in College Park. The Colonial Revival style was a major style in the development of American neighborhoods for many decades from the end of the nineteenth and the beginning of the twentieth century. During this era, elements from Classical and Georgian houses were combined and modified to produce a new vocabulary. This mixing of influences produced a wide variety of expression and form in the Colonial Revival house.

College Park's Colonial Revival houses often have tall, shuttered windows, entry porticos, and the occasional formal cornice treatment. The Colonial Revival style features a prominent, formal entry in place of the porch that is typically found on other architectural styles. However, to support the connection between the house and the public realm, elaborately paved front walks and formal landscaping are utilized. Formal rules of composition apply to the College Park Colonial Revival, distinguishing it from the Craftsman. Windows are only occasionally paired but placed on the facade in clear, symmetrical rhythms to reinforce the formality of composition. The colors are simple, light colors with white trim, and contrasting colors for shutters.

ESSENTIAL CHARACTERISTICS

- Massing: Simple, straightforward volumes with side wings and porches added to make more complex shapes
- Roofs: Simple gable, parallel with the street
- Porches: Typically a stoop or portico to celebrate the entrance to the house
- Windows and Doors: Orderly, symmetrical relationship of large windows with six-pane patterns, sometimes paired
- Siding: Wood (or appear as wood) clapboard siding
- Ornament: Simple, at doorway or portico
- Color: Light tones and whites, white trim, contrasting colors for shutters

Examples of Colonial Revival houses in College Park

After determining appropriate characteristics and details for your home, look at ways to incorporate sustainable design and materials:

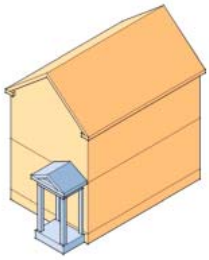
Go to Energy Efficiency in Sustainability

Go to Materials & Manufacturers in Resource Guide

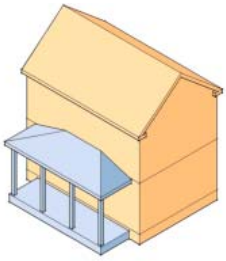
MASSING

- Massing typologies are generally very simple with side wings if necessary.
- Both gable and hip roofs are common. Gambrel roofs may be found.
- Roof pitches typically range from 6:12 to 10:12.
- Porches are either portico or full length.

Side Gable



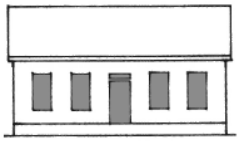
Front Gable



Side Gable

COMPOSITION

- Window patterns are generally repetitive and very simple with equal space between windows and doors.
- Compositions are often symmetrical with an odd number of bays.
- Accent windows and grouped standard windows can be used for emphasis.
- Wider houses typically have the entrance in the center of the facade; narrower houses generally have doors on the end bays.



DETAILS

Windows

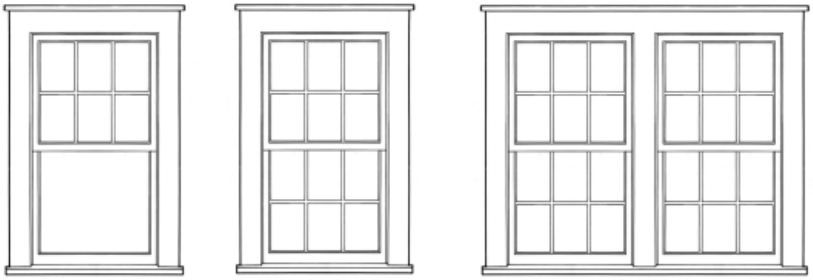
- Double hung, Vertical in proportion, with 6 over 1 or 6 over 6 mullion patterns
- Accent windows should have panes of similar proportion to standard windows and are typically used only when space is limited.

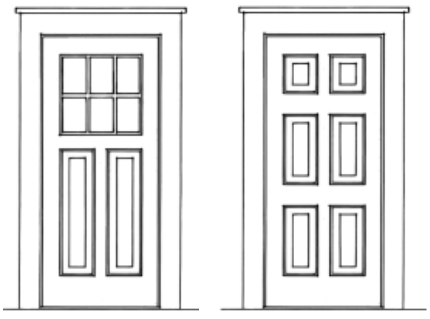
Doors

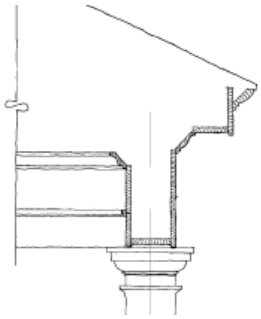
- Wood, fiberglass, or steel with traditional stile and rail proportions, panel profiles, and glazing patterns
- Six- and eight-panel doors are common; partially glazed and fully glazed doors are also used.
- Door trim should match window trim or be more elaborate in design.

Shutters

- Paneled or louvered styles are appropriate
- Half the width of the window; operable, or appear operable







Craftsman

The College Park Craftsman style emerges from two different stylistic movements. First, the two-story examples evolved from Craftsman elements and details applied largely to Victorian two-story houses. These houses are less distinguished in style than the bungalows and cottages, yet they are distinctly Craftsman in their rugged, expressive detailing. The bungalow forms in the one- and one-and-a-half-story houses are often a product of local builders' use of elements from house plan publications and mail order sources. The Arts & Crafts movement espoused a simple decorative expression of structural elements and built-in furniture that builders found suitable for cottage houses. Building during this movement was prolific since bungalows suited well the residential needs of the time.

The College Park Craftsman style is characterized by broad, open porches, roofs with deep overhangs, and exposed rafter tails or decorative brackets; asymmetric compositions, though bungalows are more regular; grouped windows with a variety of upper muntin patterns; expressive trim; and porches with brackets. Columns on Craftsman houses are very diverse in both form and material, and are much less formal than in the other architectural styles represented in this Pattern Book.

ESSENTIAL CHARACTERISTICS

- Massing: Simple, straightforward volumes
- Roofs: Simple, shallow pitched in gable or hipped shapes
- Porches: Deep porches facing the street
- Windows and Doors: Flexible compositions of orderly or asymmetrical window and door compositions; large, operable windows are typical.
- Siding: Wood (or appear as wood) clapboard siding of varied exposure, brick, or stone
- Ornament: Deep, broad, structural elements such as rafters, brackets, and columns.
- Color: Warm, arts & crafts colors.

Examples of Craftsman houses in College Park

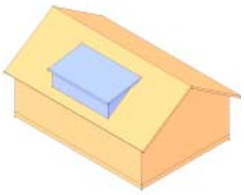
After determining appropriate characteristics and details for your home, look at ways to incorporate sustainable design and materials:

Go to Energy Efficiency in Sustainability

Go to Materials & Manufacturers in Resource Guide

MASSING

- Rectangular volume with a front- or side-facing gable roof containing a second or third story
- Gabled porch or wing added to the front leg of the L to create an asymmetrical form
- Roof pitches typically range from 4:12 to 8:12.



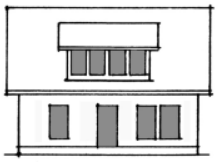
Side Gable

Front Gable

L-Shape

COMPOSITION

- Composition is characterized by asymmetrical yet balanced placement of doors and windows.
- Typically, windows occur in pairs and multiples or as sidelights for oversized ground floor windows.
- Entrance doors are most often under porches and off center.
- Doors are wide in proportion, often with transoms and sidelights.



DETAILS

Windows

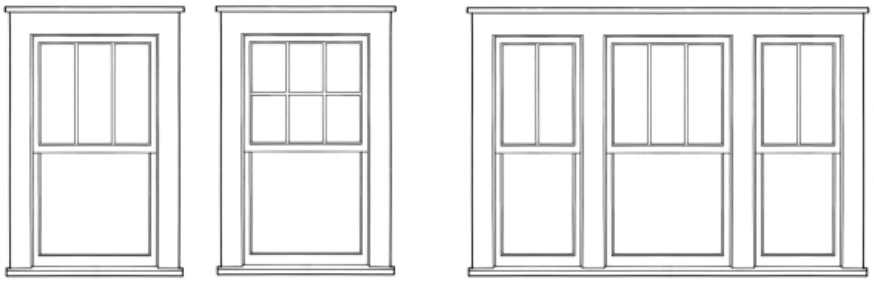
- Double hung or casements with divided lights are common with varied window pane configurations.
- Accent windows include triple windows, small square accent windows, and box bay windows supported on flat cut brackets.

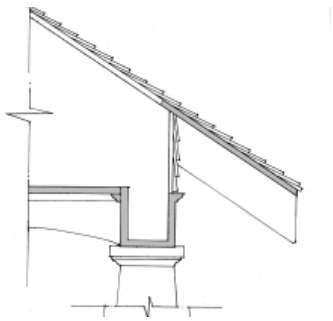
Doors

- Craftsman doors are often stained wood, painted rich colors, plank designs, or paneled door with the top half glazed.
- Doors may have sidelights or transoms in clear or leaded glass.

Shutters

- Paneled or louvered styles are appropriate.
- Half the width of the window; operable, or appear operable





Cape Cod

The Cape Cod houses of College Park were developed during the post-war housing boom as a popular interpretation of the small bungalow or cottage house. This style typically has a rectangular or almost square main body, with a side gable and dormers. Other variations include either a centered gable or gable wing facing the street. The gables facing the street may have an exaggerated vertical expression with a steeply pitched roof creating a more romantic image. Often the forms are simple with narrow trim boards and no overhang for the roofs. Entrance doors are often designed as foyers that extend out in front of the front gable.

College Park Cape Cod houses exhibit simplified elements from other styles, including the shaped hoods over the front doors and prominent chimneys exposed on the front facade found in European Romantic cottages, and Classical or Colonial Revival windows and door surrounds. Main bodies are either brick with white trim or white siding with an accent color trim. Porches tend to be small entry porticos using narrow, square columns with minimum base trim.

ESSENTIAL CHARACTERISTICS

- Massing: Simple, straightforward volumes and typically one-and-one-half story in height
- Roofs: Simple gable, parallel with the street. Roof eaves extend below second floor windows.
- Porches: Typically a stoop or portico to celebrate the entrance to the house
- Windows and Doors: Orderly, symmetrical relationship; Typically six-pane patterns
- Siding: Wood (or appear as wood) clapboard siding or brick.
- Ornament: Simple detailing.
- Color: Light tones and whites, white trim, contrasting colors for shutters.

Examples of Cape Cod houses in College Park

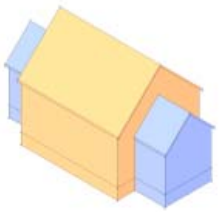
After determining appropriate characteristics and details for your home, look at ways to incorporate sustainable design and materials:

Go to Energy Efficiency in Sustainability

Go to Materials & Manufacturers in Resource Guide

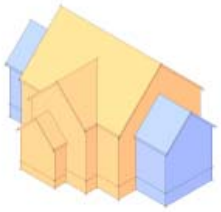
MASSING

- Rectangular or L-shaped volume: Occasionally with a front-facing gable roof containing a second story
- Often side gable wings are added to sides of the main mass volume to increase living area.
- Roof pitches typically range from 10:12 to 12:12, with pitches on street-facing gables reaching 16:12.



Side Gable

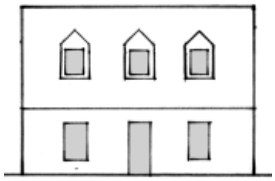
L-Shape



Nested Gables

COMPOSITION

- Composition is characterized by a simple and balanced placement of windows and doors.
- Dormer windows located in a gable are usually centered above first floor windows.
- On side gable massing, entry doors are often located at the center.



DETAILS

Windows

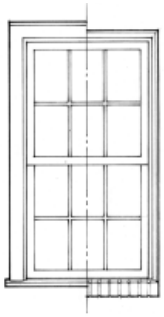
- Double hung, vertical in proportion, with 6 over 1 or 6 over 6 mullion patterns
- Special windows include picture windows and small rectangular windows used in gable ends.

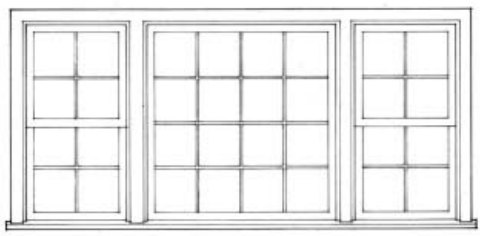
Doors

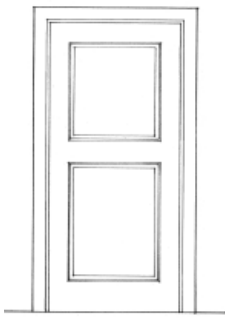
- Doors are typically 1-, 6-, or 8-paneled and often include a glass light at the top
- Round-top doors are sometimes used in front-gabled wings.

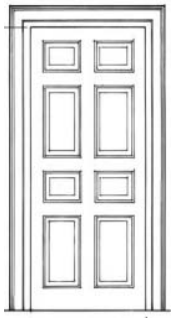
Shutters

- Paneled or louvered styles are appropriate
- Half the width of the window; operable, or appear operable









Contemporary

In the 20th century, advocates of the Modern movement called for a break with the past and for the invention of new forms in architectural design. New architecture was designed without specific patterns of time-tested traditional architecture and neighborhood building. In designing this way, architects developed housing around interior spaces and internal connectivity. With respect for the role of innovation, the recommendations provided here illustrate how to modify a contemporary house by making use of the rich palette of historic architectural influences in College Park neighborhoods.

This section highlights three important recommendations for contemporary houses. The first is to provide architecture that enhances the living space and the character and quality of the neighborhood. Elements such as porches, landscape, windows, and clearly defined entrances facing the street are critical. The second is the enhancement of the connectivity between the interior and exterior. Large openings of glass and doors that can be opened, are critical to the implementation of this concept. The third is to follow the principles of green design, which include shading devices, passive solar design, the use of overhangs, trellises, and porches, as well as providing proper orientation to the sun. In this case, details may incorporate playful, modern sensibilities.

GOALS FOR RENOVATION AND ALTERATIONS

- Neighborhood: Enhance the character of the neighborhood and the street through the presence of active, human-scaled elements such as porches and balconies.
- Connect Interior and Exterior: Connect the interior to nature and the neighborhood through large windows and doors
- Green Design: Follow the principles of green design and healthy living.

Examples of neighborly Contemporary house elements that could be included in College Park

After determining appropriate characteristics and details for your home, look at ways to incorporate sustainable design and materials:

Go to Energy Efficiency in Sustainability

Go to Materials & Manufacturers in Resource Guide

EXAMPLES OF CONTEMPORARY NEIGHBORLY HOUSE ELEMENTS

1. Porches and Terraces

2. Large Windows

3. Shading Devices

SAMPLE MODIFICATIONS OF A CONTEMPORARY HOUSE

This existing house represents a typical contemporary house in College Park. Notice that the house has no living space outside the house, connecting it to the neighborhood. It also has small windows, preventing a connection between the inside and outside.

The modification in the drawing adds the following contemporary house elements:

1. PORCHES AND TERRACES
Elements for human habitation enhance a house and the street at the same time. This provides valuable additional living space during warm months of the year, and a "gift to the street" of a feeling of a safe neighborhood where people watch the street.

2. LARGE WINDOWS

Larger, operable windows can provide better airflow during the warm months of the year, and at the same time, connect the outdoors and indoors.

3. WINDOW SHADING DEVICES

Adding window overhangs can be helpful for shielding the hot sun from the interior of a house. This allows improved balance of daylight inside. At the same time, details at the windows, in the appropriate locations, adds interesting architectural features to a house.

(left) A Contemporary house in College Park

(below) This sketch depicts modifications to create a more neighborly, livable house. These modifications include porches and terraces, larger windows, and a window shading device.

SECTION E

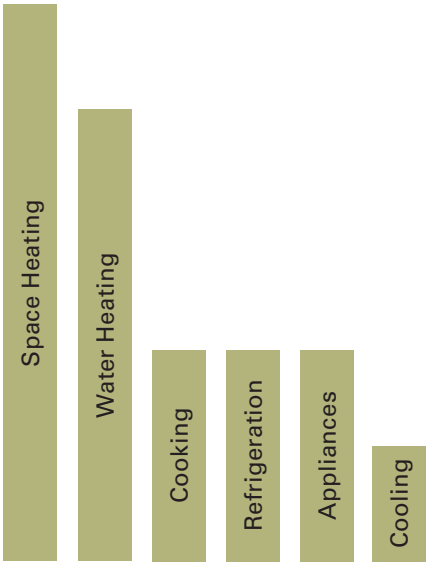
SUSTAINABILITY


CSONT 2011

INTRODUCTION

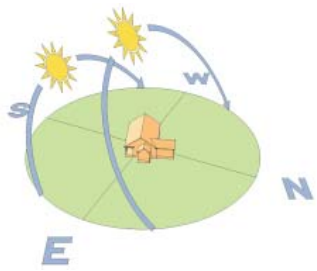
Building green is extremely important for the health of the environment, the development of strong neighborhood design principles in the College Park community, and the financial and personal health of those living in the neighborhood houses.

Including green design elements does not have to increase the cost of a house or improvement project. Many strategies are low- or no-cost solutions. Others qualify for tax incentives, rebates, and alternative financing. Green design strategies can be considered throughout the lifetime of a house, from design and initial construction to renovation and long-term maintenance. This section will help you determine how to integrate sustainable decisions into your projects and how to gain efficiency and health benefits.

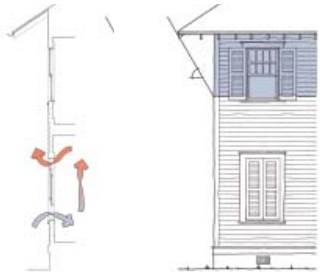


The energy distribution above shows a possible example of energy use in a single house. Every house will have a different energy use distribution based on its efficiency, the type of mechanical systems installed, and behavior patterns of residents.

SUSTAINABILITY PROJECT INITIATIVES

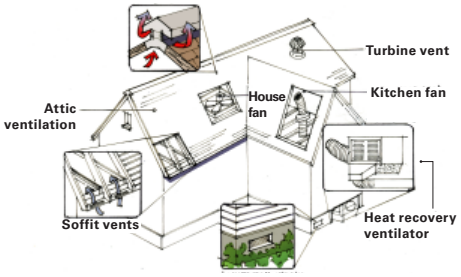


How do I site my building or addition to maximize efficiency?

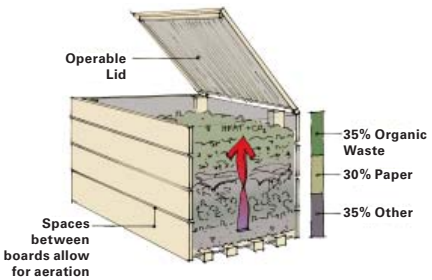


How do I reduce my heating and cooling costs?

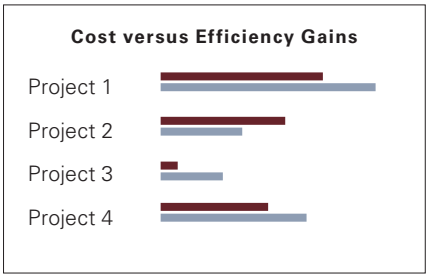
How do I improve the efficiency of my appliance and fixtures?



How can I improve the quality of my indoor environment?



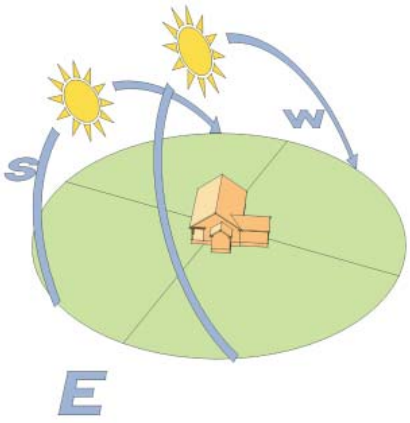
How can I make sustainable choices about my lifestyle?



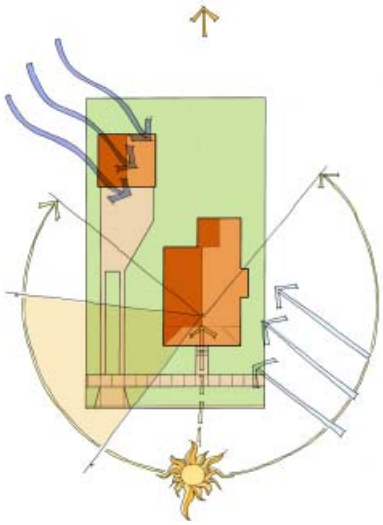
How do I weigh costs and efficiency benefits?

Site Design

HOW DO I SITE MY BUILDING OR ADDITION TO MAXIMIZE EFFICIENCY?



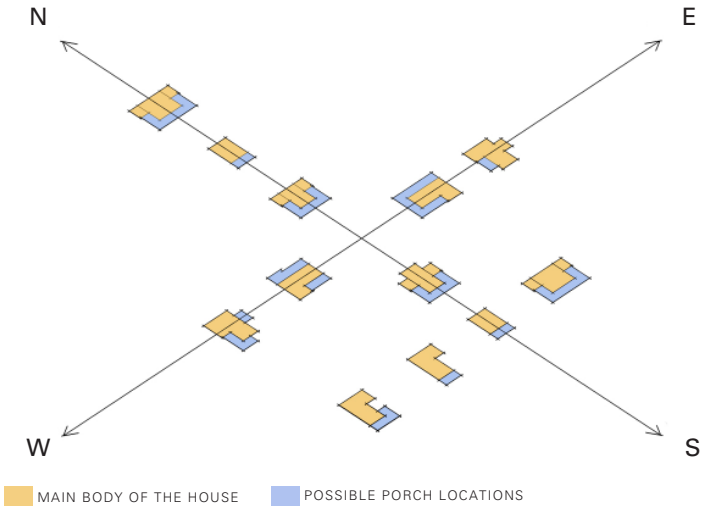
Solar Orientation of the Building
Orient the house on the site so that main facade faces south. This provides passive solar energy to warm the house in the cool months when the sun is lower in the sky.



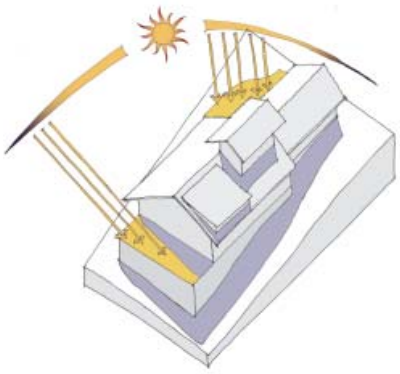
Orientation of Living Spaces
Locate morning spaces like kitchens and breakfast nooks to face southeast. Allow afternoon sun to warn primary living spaces such as living and family rooms by facing these rooms to the south and west.

SITE DESIGN STRATEGIES

1. Orient the building or addition so that primary living spaces face south or receive sun.
2. Maximize the number of southern-facing windows.
3. Place porches on southern facing facades if possible to create livable outdoor space and shade the main mass of the house.
4. Locate terraces and outdoor living spaces on east, south, and west sides of houses to maximize sunlight.
5. Plant evergreens and landscape windscreens to protect the yard and house.
6. Utilize existing topography.



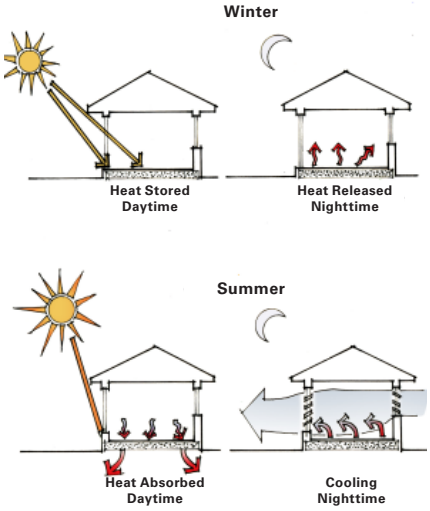
Porch Placement
Locate porches on southern-facing facades. This warms porches and terraces, creating livable outdoor space more months of the year. South-facing porches also shade windows and main facades from the most intense sunlight, helping keep the house cool in warmer months.

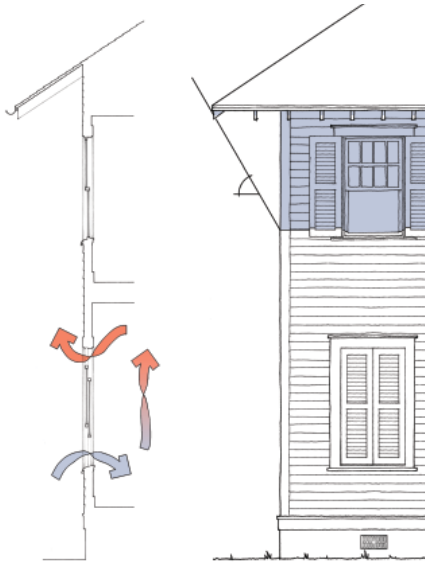


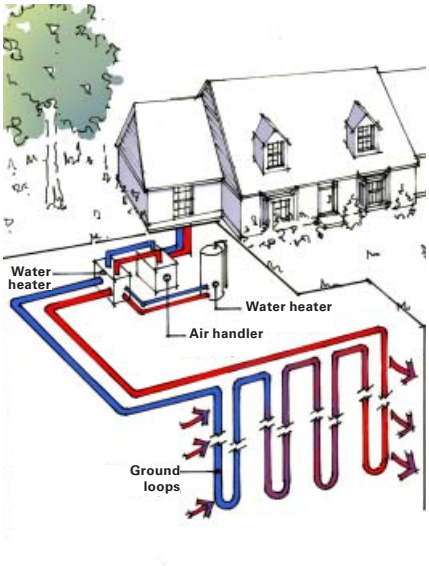
Usable Terrace Spaces
Locate terraces and upper level porches on the east, south, and west facing facades.

Energy Efficiency

HOW DO I REDUCE MY HEATING AND COOLING COSTS?







PASSIVE HEATING TECHNIQUES

- Orient living spaces towards the south and maximize southern-facing windows.
- Install high efficiency, non-toxic, non-UF, high R-value insulation.
- Use Low-E, non-toxic house wrap under house siding.
- Build thicker walls with higher thermal mass.
- Minimize air leaks through caulking and sealing, especially around windows, doors, foundations, and ceilings.
- Minimize the size of the house.
- Increase attic insulation (R-38 or higher).
- Install windows and glass doors with insulated, double-paned glass, with argon gas, and low emissivity (with good NFRC and Energy Star rating).

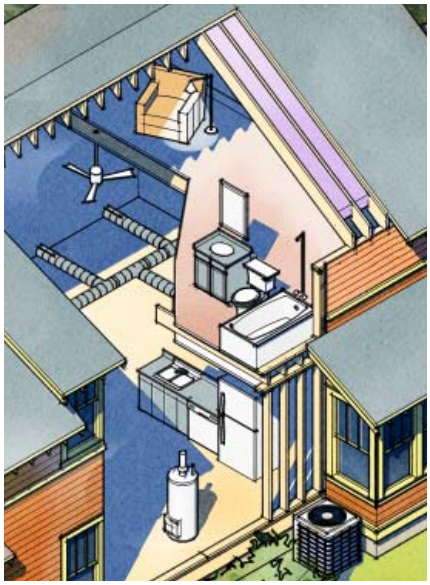
PASSIVE COOLING TECHNIQUES

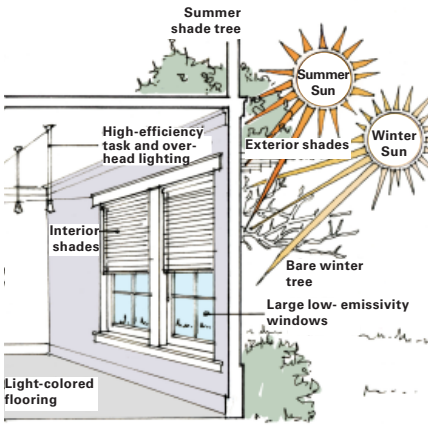
- Create shading with vegetation, porches, and overhangs.
- Plant vegetation around the foundation of the house.
- Install operable shutters.
- Build thicker walls with higher thermal mass or non-toxic house wrap.
- Increase ceiling heights.
- Reduce mechanical heat gain from lights, computers, water heater, and plumbing.
- Install a "cool roof" made of light-colored or solar-reflective and heat-reflective shingles.
- Install ridge vent along the roofline and soffit vents to improve air circulation.
- Install operable windows with upper and lower openings.
- Provide opportunities for cross-ventilation.

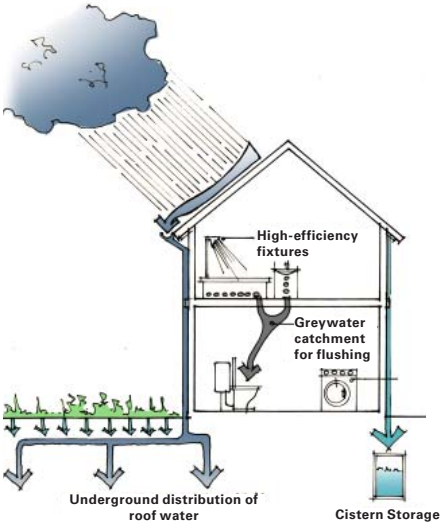
MECHANICAL SYSTEM IMPROVEMENTS

- Have an energy audit.
- Verify seal on ducts.
- In additions no served by the house HVAC system, install energy efficient Ductless Mini Split heating/ AC units.
- Upgrade the HVAC system to a higher efficiency (Energy Star CEE Tier 3 Rating).
- Install ceiling fans with Energy Star ratings to improve circulation.
- Install a geothermal heat pump.
- Install programmable thermostat and set it to reduce heating/cooling during minimal use hours.
- Install photovoltaic cells (e.g. solar panels) to produce electricity and/or install solar heating tubes as part of a solar water heating system.
- Power strips to shut off appliances, etc.

HOW DO I IMPROVE THE EFFICIENCY OF MY APPLIANCES AND FIXTURES?







EFFICIENT APPLIANCES

- Purchase appliances with Energy Star CEE Tier 3 Rating, in particular refrigerators, freezers, and washers.
- Replace refrigerators that are more than 10 years old with high efficiency model.
- Unplug appliances when not in use to reduce electrical base load.

EFFICIENT LIGHTING

- Maximize natural light.
- Install day and task lighting.
- Turn lights off when not in use.
- Choose light fixtures with Energy Star ratings.
- Replace T12 fluorescent tube lights with more energy efficient T8 fluorescent tube lights; Replace fluorescent tube lights with LED lights or T5 fluorescent tube lights.
- Use “Soft White” lights in evening-occupied rooms to avoid interference with the body's melatonin production.
- Use “Bright/Cool White” and “Daylight” lights only for daytime spaces like kitchens, bathrooms, and work spaces.

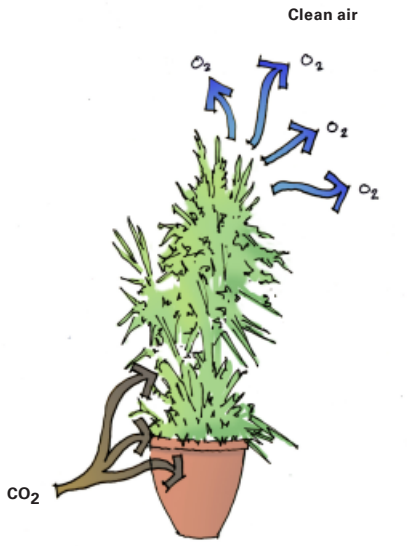
WATER-CONSERVING FIXTURES

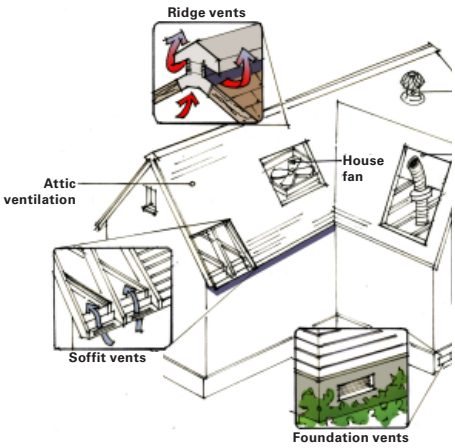
- Replace high-water-volume toilets with low-water-volume or composting toilets.
- Replace fixtures such as faucets, shower heads, toilets, etc.
- Install greywater catchment systems to reuse water for irrigation and flushing.

For specific manufacturers and recommended specifications
Materials and Manufacturers
Go to Green Design Resources

Living Environment

HOW CAN I IMPROVE THE QUALITY OF MY INDOOR ENVIRONMENT?





ENHANCE THE LIVABILITY OF SPACES

- Maximize natural ventilation.
- Install large, operable windows.
- Provide for the maximum amount of daylight.
- Build higher ceiling heights.
- Keep indoor plants to purify air.
- Create livable outdoor spaces.

DETECT HARMFUL GASES

- Place carbon monoxide detectors in the garage, near the chimney, and near the gas stove, gas water heater, and gas furnace.
- Install a radon detector in the basement.
- Place smoke detectors in the basement, in the kitchen, and outside bedrooms.

CONTROL HUMIDITY AND PREVENT MOLD

- Ventilate the bathroom and basement to prevent mold growth.
- Use a dehumidifier when humidity is high to prevent mold growth.
- Use mold-prevention paint on the walls of bathroom and basement.
- Waterproof the basement with drainage and sealers.
- Install a sump pump to avoid basement flooding.
- Detach or adequately seal garage.

For specific manufacturers and recommended specifications
Materials and Manufacturers
Go to Green Design Resources

REDUCE TOXICITY

- Use exterior grade wood in the interior as well as the exterior.
- Use Urea Formaldehyde/ UF-free Oriented Stand Boards (OSB)/ Softwood Plywood/ APA Exterior Plywood/ APA Exposure 1 Plywood/ Isoboard/ Strawboard.
- Do not use Hardwood Plywood/ Fiberboard/ MDF/ Particle board that contains Urea Formaldehyde (UF).
- If a wood containing Urea Formaldehyde (UF) must be used, it should be sealed.
- Use ACQ-treated wood instead of CCA-treated wood.
- Zero VOC or Low VOC products labeled with “Green Seal,” “Green Guard,” and “Scientific Certification Systems/ SCS”.
- Use non-toxic cleaners and store daily cleaners away from bedrooms and living areas.
- Use HEPA air filters on furnaces and in room air cleaners.
- Replace vinyl siding with Hardiplank or other non-toxic building materials.
- Replace vinyl and rubber-backed carpet with ceramic tile or carpet with CRI Green Label.
- Choose sustainable solid wood furniture, cabinets, and building materials. Seal any pressed wood containing Urea Formaldehyde.
- Water filters on sinks and shower faucets.

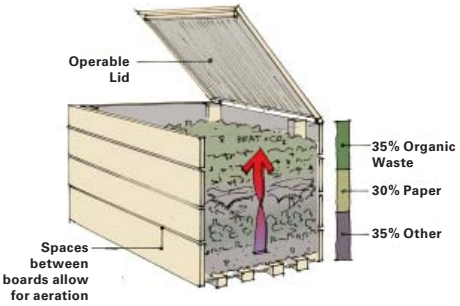
HOW CAN I MAKE SUSTAINABLE CHOICES ABOUT MY LIFESTYLE?

LIFESTYLE

- Recycle
- Build a composting bin for organic waste.
- Work from home several days a week if possible.
- Explore community and home food production.
- Create a construction waste management plan for any home improvement projects.
- Prioritize local products and labor when doing improvement projects.
- Electric vs. gas powered outdoor equipment.
- Sign up for wind energy.

TRANSPORTATION

- Take advantage of College Park's access to bus, metro, and rail service when making personal transportation choices.
- The yearly cost of owning an automobile ranges from $7,000 to $10,000 per car. Transportation costs, including gas are becoming greater burdens for families each year.
- Reducing the number of cars your household owns by one can free capital for home improvement projects.
- Consider using a electric, hybrid, or fuel efficient car or public transit.



A compost bin makes rich compost by a natural process of breaking up organic waste. This can benefit the environment by resulting in less household trash, use of fewer garbage bags, and creating a natural fertilizer for gardening.

HOW DO I WEIGH COSTS AND BENEFITS?

Determining the costs and benefits of sustainability projects can be difficult and highly specific. Some projects may be simple with little to no cost. Others may require greater investment, but can provide greater savings in the future.

1. Take into account the physical characteristics of the building that affect the cost of projects:
   - Type of construction
   - Age of house or building
   - Size of house
2. Research the type of project you are considering using the resources in this guide and others
3. Have a utility company do an energy audit on your house to help determine where savings can be gained
4. Have contractors visit your home and provide estimates for potential projects
5. Research federal, state, and local incentives, tax credits, and other financing options for green improvements
6. Estimate savings in energy bills and try to determine length of payback and lifetime savings
7. Weigh benefits which might be realized in the future, such as increased health
8. Decide which projects have the greatest benefit and execute

Outdoor Livability

HOW CAN I MAKE MY YARD MORE INVITING AND USABLE?

DESIGN FOR COMFORT

- Plant trees strategically to provide shade in key areas during the time of day those areas are likely to be used.
- Plant evergreen trees and shrubs in a location to block cold winter winds.
- Locate places for gathering and socialization on the southwest side of the house to take advantage of the evening sun.
- Water creates both a visual interest and has a cooling effect on the yard.
- Provide opportunities to sit in a variety of locations.
- Use a variety of plant materials to create visual interest.
- Install mature plant materials in order to provide shade and screening sooner.

DESIGN FOR USE

- Evaluate the specific outdoor needs and desires of each member of the family.
- Design space in a flexible manner to accommodate for a wide variety of uses.
- Create both small, secluded spaces as well as big, open spaces.
- Create places for people to gather.

DESIGN FOR SAFETY

- Design to create physical separation between public and private spaces at the front of the house, but do not create a visual barrier.
- Provide adequate lighting at any possible entrance to the house.
- Stairs or vertical transitions should be well-lit.
- Play areas for children should be clearly visible from the house.
- Avoid plants that, when ingested by a child or pet, could be poisonous.
- Provide soft surface materials around all elevated play structures.
- Avoid planting trees too close to the building foundation in order to prevent damage to the home's structural foundation.

Environmental and Ecological Considerations

HOW CAN I MAKE MY LANDSCAPE MORE ENVIRONMENTALLY RESPONSIBLE?

HABITAT PROTECTION

The best way to create habitat is to protect and expand upon the habitat that is already there.

- When building or adding on to your house, fence off areas of significant biodiversity to prevent undue damage.
- After construction, revegetate disturbed areas using native plants that tie into the natural vegetation that was protected.

BUY LOCAL

Some of the greatest environmental costs of construction come from the use of fossil fuels (and the resulting byproducts of their combustion) in shipping products/materials. By using product/materials that are manufactured within 250 miles of your home, the shipping distance is reduced, and environmental quality and natural resources are preserved.

SOLAR ENERGY

Use solar energy to power outdoor lighting and irrigation systems.

PRODUCTIVE LANDSCAPES

Homeowners can further reduce their carbon footprint by using their yard to produce food that otherwise would need to be shipped.

- Edible gardens can take many forms, from small scale herb gardens to larger fruit and vegetable production.
- Many edible plants also have a high aesthetic value and can easily be grown along side flowering plants and shrubs in a traditional ornamental garden rather than in a typical vegetable garden setting.
- Herbs, tomatoes, and other small edible plants may also be planted in pots or containers if space is limited.

COMPOSTING

Composting leaves, dead plants, and plant-based food waste (do not compost meat because it can attract animals) restores nutrients into the ground.

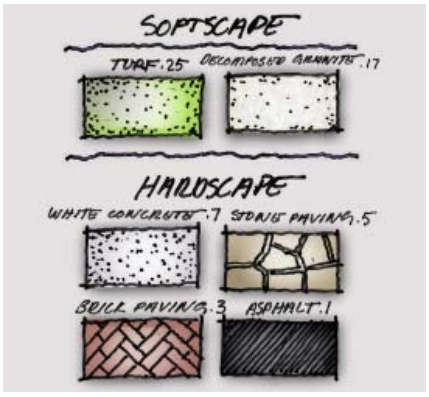
NIGHT SKY PROTECTION

Pollution isn't limited to unwanted chemicals or gases in the environment. Light pollution is increasingly becoming a problem as it adversely effects the health and behavior of both humans and wildlife. The following measures can be taken to protect views of the night sky.

- Avoid uplighting
- All outdoor lighting should use full cut off fixtures that direct all light down towards the ground.
- Use fixtures that do not allow direct visibility of the bulb from neighboring properties and public areas by either directing all light downward or encasing the bulb with semi-opaque glass or plastic.
- Avoid shining lights directly onto surfaces of high reflectivity such as windows or cars.
- Outdoor lights should be of low intensity.
- Higher intensity lighting should only be located in areas necessary for safety considerations.
- Bulb suggestions: 2700k CFL or LED

Energy Efficiency

HOW CAN MY LANDSCAPE HELP CUT DOWN MY ENERGY COSTS?



TREE & SHRUB PLACEMENT

Proper tree selection and placement can significantly reduce the amount of energy (and its associated costs) used to heat and cool your home.

- Plant trees on the southern and western sides of the house to help shade the home during the hottest times of the day
- Use deciduous trees (trees that shed their leaves during the winter), which will shade the house during the summer, but let the warming sun through during the winter
- Limit the number of trees on the eastern side of the house to allow the early morning sun to warm the home
- Plant shrubs and evergreens along the northern side of the house to help insulate against heat loss in the winter

PLANT COVER

Building materials such as concrete, roofing, siding, etc. tend to absorb and retain solar heat to a much greater degree than plant materials. This causes a condition known as the Urban Heat Island Effect, wherein sites with a significant amount of buildings and pavement tend to be much warmer than sites with natural, vegetated conditions.

The best way to combat the Urban Heat Island Effect is by planting shade-giving trees and shrubs throughout your yard.

- Try to achieve at least a 70% tree canopy over your entire yard, paying particular attention to shading structures and paved areas
- Plant shrubs next to paved areas to provide shade during at least some portions of the day and consequently reduce heat gain.

BUILDING MATERIALS

Another way to combat the Urban Heat Island Effect is to select building and paving materials that reflect solar energy rather than absorb it. The degree to which a material reflects solar energy is known as "albedo."

- Some building materials are given an albedo rating. A high albedo rating means it will reflect more solar energy and absorb less heat
- Soft materials like grass or dirt may have a low albedo, but tend to absorb and give off less heat than hard materials like concrete or asphalt.

When an albedo rating is not available for a hard paving material, a general rule of thumb to use is:

- The lighter the color of the material, the more heat it will reflect and the cooler it will be
- The darker the color of the material, the more heat it will absorb and the hotter it will be

Water Conservation and Quality

HOW CAN I REDUCE MY WATER BILLS?

TURF & PLANTS

The most effective way of reducing water consumption is by minimizing the use of thirsty plants (especially turf) and selecting plants that need little or no supplemental irrigation.

- Reduce the amount of turf to around 20% of the yard and increase the amount of areas with planting or permeable non-vegetative groundcover.
- Use native species of turf and plants that are adapted to climactic conditions of your area.

IRRIGATION SYSTEM DESIGN

Proper irrigation design will also significantly reduce consumption while still giving your plants the water that they need.

- Work with existing hydrology by planting thirsty plants in areas where water tends to collect.
- Irrigate only between the hours of 10 pm and 4 am to allow for maximum water infiltration and minimize evaporation during the heat of the day.
- Install drip irrigation or microspray devices.
- Install a weather-sensitive controller.

NON-POTABLE WATER

You can reduce water consumption by supplementing it with non-potable water sources.

- Direct rain gutter downspouts into lawns and planting beds.
- Direct stormwater runoff from paving into lawn and planting beds.
- Collect and store rainwater in water barrels or cisterns for later use.
- Implement a "greywater" retention and treatment system for use in the landscape.

INTERNAL MEASURES

- Check for leaks
- Low flow appliances

HOW CAN I KEEP FROM POLLUTING THE SURROUNDING RIVERS, STREAMS, AND GROUNDWATER?

POROUS PAVEMENT

The best way to clean out pollutants from water is to get it into the ground as soon as possible where it is naturally filtered and cleaned.

- Where possible install porous paving materials to allow for faster infiltration.
  - Gravel
  - Mulch
  - Porous concrete or asphalt
  - Sand-set brick or pavers

RAIN GARDENS & BIOSWALES

Rain gardens and bioswales can be used to collect stormwater and facilitate its infiltration into the ground.

- Rain gardens are depressions in the ground where stormwater can be directed and are planted with plants that can tolerate a certain amount of saturation.
- Bioswales are vegetated channels designed to collect, direct, and slow down the flow of stormwater, giving it more time to infiltrate into the ground. Typically they connect into a stormwater storage area such as a detention pond or wetland.

Porous paving next to impervious paving

A rain garden in a rural setting

Native Plant Use

WHY SHOULD I USE NATIVE PLANTS IN MY LANDSCAPE?

WATER EFFICIENCY

Native plants are already adapted to the climate of the region and consequently are capable of surviving without supplemental irrigation, provided they are planted in conditions similar to those found in their natural environments.

HARDINESS

Through the millions of years that native plants grow in a given region, they necessarily adapt to the variety of diseases, pests, and climactic conditions typical to the area. Tolerance to conditions such as drought, extreme winters, or high elevation become a part of their genetic makeup. These adaptation make native plants tough enough to survive most challenges, including even the most inexperienced of gardeners.

URBAN WILDLIFE

Just as native plants have become adapted to the climate and conditions of a region, the native wildlife are equally adapted and dependent upon these native plants. As more and more natural land becomes developed, homeowners can help restore some of that lost habitat by planting native trees, shrubs, and grasses, giving homes to birds, insects, and other wildlife and helping to maintain the necessary biodiversity of our fragile ecosystem.

TYPICAL NATIVE TREES

- American Arborvitae
  Thuja occidentalis
- American Beech
  Fagus grandifolia
- Bald Cypress
  Taxodium distichum
- Flowering Dogwood
  Cornus florida
- Sweet Gum
  Liquidamber styraciflua
- Hickory
  Carya tomentosa
- American Holly
  Ilex opaca
- American Hornbeam
  Carpinus caoliniana
- American Linden
  Tilia americana
- Cucumbertree Magnolia
  Magnolia acuminata
- Red Maple
  Acer rubrum
- Sugar Maple
  Acer saccharum
- Black Oak
  Quercus velutina
- Pin Oak
  Quercus palustris
- White Oak
  Quercus alba
- Eastern Redbud
  Cercic canadensis

American Beech, Fagus grandifolia

American Holly, Ilex opaca

Flowering Dogwood, Cornus florida

Sweet Gum, Liquidamber styraciflua

TYPICAL NATIVE SHRUBS

- Azalea
  Rhododendron canescens
- Bayberry
  Myrica pannsylvanica
- American Beautyberry
  Callicarpa americana
- Smooth Hydrangea
  Hydrangea arborescens
- Inkberry
  Ilex glabra
- Mountain Laurel
  Kalmia latifolia
- Summersweet Clethra
  Clethra alnifolia
- Witch Hazel
  Hamamelis virginiana

INVASIVE PLANT MITIGATION

Using native plants helps to prevent the spread of invasive plant species. Some common invasive plants follow (for a more detailed listing visit www.mdinvasivesp.org):

- Barberry
  Berberis sp.
- Clematis
  Clematis sp.
- English Ivy
  Hedera helix
- Euonymus
  Euonymus sp.
- Periwinkle
  Vinca minor

Azalea, Rhododendron canescens

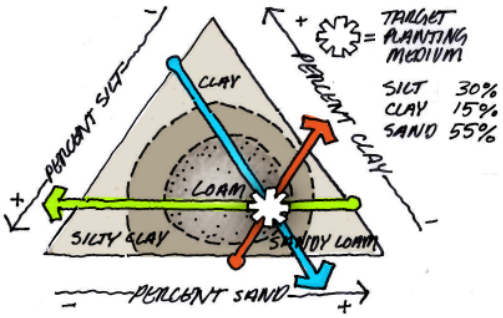
Bayberry, Myrica pannsylvanica

Witch Hazel, Hamamelis virginiana

Mountain Laurel, Kalmia latifolia

Maintenance

HOW CAN I KEEP MY YARD LOOKING HEALTHY AND WELL CARED FOR?



Soil Structure Pyramid

NUTRIENT RECYCLING

As your plants grow they take needed nutrients out of the soil. The best way to keep your plants growing healthy and strong is to replenish the soil with those necessary nutrients. The most sustainable way to do that is to recycle those nutrients directly back into the ground.

- Lawn clippings can be left on the lawn where they will quickly dry up and work their way back into the soil as a natural fertilizer.
- Leaves, twigs, and other dead plant material should be first composted and then mixed back into the soil prior to planting.
- Additional nutrients can be provided by also composting your plant-based food.
- Larger branches can be chipped and used as mulch, which over time decomposes and replenishes the soil's nutrients.

SOIL AMENDMENTS

Some soils are naturally lacking in some of the nutrients needed for healthy plant growth, or don't have the best structure for healthy root growth. In these cases it is necessary to amend the soil.

- In the case of nutrient depletion it is often best to first determine what specific nutrients are lacking and then mix the necessary amendments into the soil. Simply applying an all-purpose fertilizer on top of the soil doesn't always guarantee delivery of the necessary nutrients.
- Amending soil structure means mixing the soil to get even proportions of sand, silt, and clay. Adding organic material, such as compost, will also help break up the structure as well as provide nutrients.

NON-TOXIC HERBICIDES, PESTICIDES, & FERTILIZERS

When the use of herbicides, pesticides and fertilizers is necessary, be sure to use non-toxic varieties in order to prevent the infiltration and percolation of the toxins into the groundwater and run off into streams.

- Weed garden
- Use natural pest control for plants, insects, and kitchen waste.
- Clove oil or citrus oil for natural pest control

Environmental Protection During Construction

HOW CAN I PROTECT MY EXISTING LANDSCAPE WHILE BUILDING OR ADDING ON TO MY HOUSE?

TOPSOIL PRESERVATION

Topsoil is the topmost 2"–8" of soil and has the highest concentration of organic matter. Plants get most of their nutrients from this layer making it an extremely valuable resource that, once lost, takes several years to replenish.

» During any construction activity that involves moving earth, topsoil should be scraped and stockpiled and then reapplied after construction ends.

TREE & LANDSCAPE PROTECTION

Mature trees add character and value to your landscape. Consequently, when possible, mature trees should be preserved and protected during construction activities.

» A fence should surround the tree and encompass the diameter of the tree's dripline (the extent to which the tree's branches extend) throughout construction.

Topsoil being loaded for storage

Tree protection fencing

HOW CAN I KEEP FROM POLLUTING THE ENVIRONMENT DURING CONSTRUCTION?

EROSION & SEDIMENT CONTROL

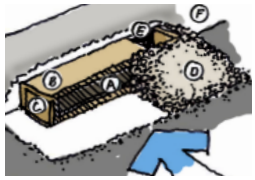
The Clean Water Act (1977) dictates that all sediment resulting from construction activities must be trapped and kept on site and must not be allowed to enter streams or stormwater systems.

» To reduce erosion, use erosion control mats or hydroseeding on all areas of exposed earth, and immediately reestablish vegetation when finished with construction.

» To trap the sediment from any erosion that does occur, outfit all inlets to stormwater systems or streams with sediment filters and traps, or surrounded with silt bags.

Sediment filter at a curb inlet

A - Wire Mesh
B - Wood Frame
C - Scrap Wood
D - Washed Stone
E - Inlet Opening
F - Curb



Concrete washout area

CONSTRUCTION WASTE MANAGEMENT

Construction waste, such as concrete or paint washouts, should be carefully managed as the chemicals and materials can delay or retard the growth of plants.

MATERIAL REUSE & RECYCLING

When engaging in demolition of existing structures or pavement on a site, keep in mind that many of these materials can be recycled and used later in your construction. Some examples are as follows:

» Concrete can be broken up and use as aggregate in new concrete or as bedding for pipes or base for new paving.

» Old brick can be reused, sold, or crushed and used as a gravel mulch or aggregate.

» Existing asphalt can be directly recycled into new asphalt.

» Old decking and structural wood members can be chipped.

SECTION F CREATING A SENSE OF PLACE

INTRODUCTION

Just as projects for individual houses can greatly increase the livability, efficiency, and value of a property, neighborhood improvements can offer the same benefits for an entire community. Together with home owner efforts, community-led initiatives – both built and cultural – have profound impacts on neighborhood quality of life and value. These initiatives are usually led by neighborhood associations but can also be the result of a collection of home owners wishing the best for their neighborhood.

Neighborhood projects are a practical means to addressing several neighborhood issues such as safety, stormwater management, parking, as well as aesthetics.

A sense of place (placemaking) is the result of home owners, the community, and culture working hand-in-hand.

CONSTRUCTED

Homeowner-Led

- Build and use front porches or stoops.
- Celebrate entryways and paths.
- Conceal off-street parking locations.
- Conceal garbage cans, recycling bins, meters, and transformer boxes.
- Construct low, semi-transparent front yard fences or short landscaping walls.
- Install front-yard plantings, hedgerows, and trees.
- Install foundation-level planting.

Community-Led

- Community art
- Community garden(s)
- Clear drainage ways and street cleaning
- Install benches, bike racks, and garbage cans.
- Install sidewalks, planting strips, bio-swales, and permeable paving.
- On-street parking (where street dimensions allow)
- Safe routes to school (http://www.walktoschool-usa.org/)
- Street lighting
- Striped bike paths on streets

CULTURAL

Community-Led

- Block gatherings
- College Park Pattern Book home show
- Garden clubs
- House tours
- Neighborhood Community Association
- Neighborhood Design Center
- Establish Neighborhood Improvement District (NID)

Front yard landscaping, site wall, and porch

Sidewalk, planting strip, and on-street parking

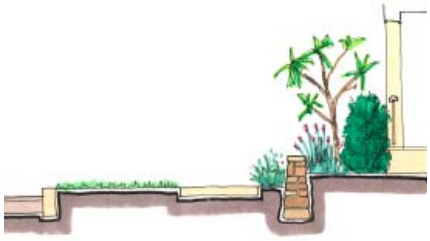
Block gathering in neighborhood park

COMMUNITY-LED PROJECTS

Community-led efforts provide a neighborhood identity, enhance safety, and increase value of its properties.

Installation of public art strengthens a neighborhood's identity and cultural heritage.

Community gardens provide a central focal point to the neighborhood and allow for local food production and recreational gardening if not possible on individual lots.



Installation of planting strip and sidewalk

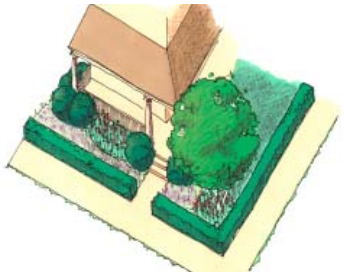
Painting of bike lane and on-street parking

Although ideally separated from the street by a planting strip, it is sometimes sufficient to install a sidewalk adjacent to the curb.

HOMEOWNER-LED PROJECTS

Homeowner-led efforts are discussed throughout the Pattern Book. Specific elements can greatly enhance the neighborhoods that they occupy beyond providing immediate benefits to the home owner.

Celebrated front entry



Front garden planting

SECTION G

RESOURCE GUIDE

Assembling Your Team

The process to designing a new home, adding on to a house, or renovating a home can be very intimidating. Although it may be manageable without professional help, hiring a knowledgeable professional can greatly assist you in seeing your project through from conception to completion.

WHAT SHOULD BE CONSIDERED WHEN ASSEMBLING A TEAM FOR A HOME PROJECT?

Budget and Priority

Start by setting a budget for your work. Use this number as a benchmark throughout the process. In the process of working with existing homes, and older homes in particular, unforeseen challenges that may arise. It is important to set priorities for your project that include necessities and 'wish list' items. From start to finish, you will need to work with your budget and your priorities.

Generally, developing the appropriate exterior envelope and structure is a strong priority. Long-lasting high quality materials, and strong curb appeal are good investments in a house in the first phase. Interior finishes can be added and improved incrementally over time as budget allows or with sweat equity.

Hiring a Design Professional

An architect, landscape architect, or interior designer can prepare a set of plans and specifications for your project. Simply put, these are a set of 'instructions' for a builder to use in the completion of your project. These professionals can help you select a builder and, during construction, can review the contractor's work to verify that the house is constructed according to plans and specifications. The design professional will serve as the owner's representative during the entire construction process.

Hiring a Builder

If you have chosen to work with a design professional, he or she can help you select a builder. However, some projects may not include a design professional, and some builders will provide design services as a part of their standard services. In the selection of a builder, it is critical to learn about his or her relevant experience and capacity to focus on your project. Talking with references are critical to understanding their work process, sensitivity to your budget and your own needs before, during, and after construction.

QUESTIONS FOR INTERVIEWING A DESIGN PROFESSIONAL

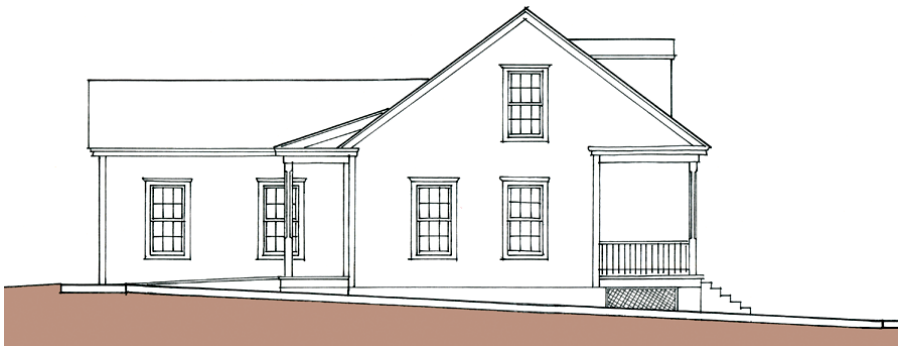
- What is your experience in projects like mine?
- What other projects are you working on?
- What is your design process?
- How will you work with me?
- Who will I work with in your firm?
- How do you handle your professional fees?
- How do you handle the fees for design changes before and during construction?
- Would you provide me with some references?

Accessibility and Visitability

Houses, like neighborhood blocks, parks, and larger public buildings, should be accessible for persons with physical disabilities. For housing to be truly inclusive, it is important to work toward a standard of accessibility. This standard should not only permit disabled persons to visit their neighbors, but it should allow physically-able persons to age comfortably while planning for the future. Design strategies that are both attractive and functional for families at any stage or condition of life should be considered. This requires careful thought when faced with areas of varying topography. Different conditions call for different solutions. Design strategies can range in scale and price, but there are numerous accessibility features that can be inexpensive and unobtrusive.

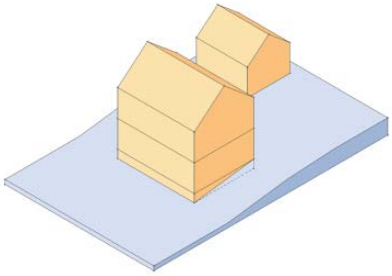
Visitability does not offer a completely accessible house but rather a barrier-free home that provides the opportunity for disabled persons to visit the home of a friend without having to deal with major inconveniences.

Visitability can be accomplished by using raised slab foundation construction. This allows the patio entrance at grade to be at the same elevation as the interior floor. It also makes it possible to have a sloped walk along the side of the house with its change in grade taken up along the side of the foundation wall. The house should also have a bathroom on the ground floor that can be used by disabled persons. If it is a small powder room, an outward opening door yielding a 32-inch clear passage space and path inside can provide enough room for their convenience.

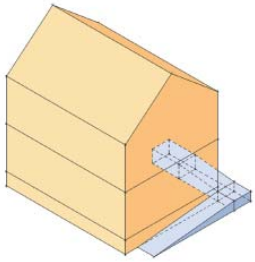


When possible, provide a curved front sidewalk with a grade of no more than 5% to be used to access the side of the front porch. No ramps or railings are needed if a walk or driveway can provide access from one end of the house on a sloping site.

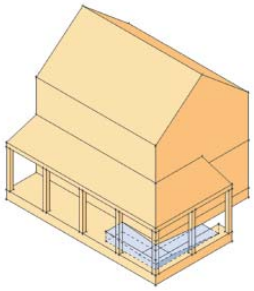
DESIGN STRATEGIES



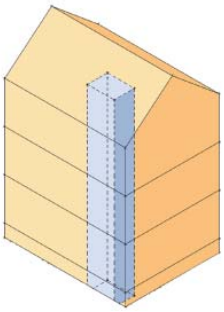
Sloping Site



Exterior Ramp



Embedded Ramp



Small Interior Elevator

Materials and Manufacturers

The following partial list of national manufacturers of building products is provided as a starting point in the search for appropriate building materials.

WINDOWS

Marvin
www.marvin.com

- Wood double-hung and casement
- Clad double-hung and casement with aluminum trim accessories
- Replacement sash w/ profiled aluminum panning
- Wood or clad simulated divided lights (SDL)
- French Doors

Caradco
www.jeld-wen.com/windows/wood/caradco

- Wood double-hung and casement
- Clad double-hung and casement with aluminum trim accessories
- Wood or clad simulated divided lights (SDL)
- French Doors

Windsor
www.windsorwindows.com

- Wood double-hung and casement
- Cellular PVC Legend Series double-hung and casement
- Wood or PVC simulated divided lights (SDL)
- Direct set transoms and sidelights

Atrium
www.atrium.com

- Insulated, double-paned glass, with argon gas, and low emissivity (with good NFRC and Energy Star rating)

ENTRY DOORS

Simpson
www.simpsondoor.com

- Wood doors: Appropriate for all styles; hard to find Arts & Crafts door (#1662) is less than $400; several hard-to-find 2/3 light Victorian doors

Nord
www.jeld-wen.com/windows/wood/norco

- Wood doors: Classical and Colonial Revival styles; some Victorian doors

Thermatru
www.thermatru.com

- Fiberglass and Premium Steel Series
- Steel Doors: Classical, Colonial Revival, and Victorian styles; acceptable Arts & Crafts doors

Stanley
www.stanleyworks.com

- Fiberglass and steel doors: Classical, Colonial Revival, and Victorian styles

Peachtree
www.peach99.com

- Fiberglass and steel doors: Classical, Colonial Revival, and Victorian styles

Atrium
www.atrium.com

- Sliding glass doors: insulated, double-paned glass, with argon gas, and low emissivity (with good NFRC and Energy Star rating)

Therma-Tru
http://www.thermatru.com

- Full glass, steel entry doors: insulated, double-paned glass, with low emissivity (with NFRC and Energy Star rating)

SHUTTERS

Southern Shutter Company
www.southernshutters.com

J&L Shutters
www.jlshutters.com

- Stephen Fuller Signature Series (composite shutters, Permex)

COLUMNS

Turncraft
www.turncraft.com

» Architecturally correct round and square composite and wood columns; Arts & Crafts tapered square "Polybox"; composite columns

Column & Post
www.columnpost.com

» Architecturally correct round and square composite columns

Somerset
www.somersetcolumns.com

» Architecturally correct round and square wood columns and pilasters

HB&G
www.hbgcolumns.com

» PermaPorch system: Cellular pvc; 2x2 square or turned balusters with "Savannah" top rail

EXTERIOR SIDING

James Hardie
www.jameshardie.com

» Hardiplank (fiber cement), lap siding, shingle, panel, and soffit products

Georgia-Pacific
www.gp.com

» Fiber cement cladding board-beaded paneling

EXTERIOR MOLDING, TRIM, AND BRACKETS

Chemcrest
www.chemcrest.com

» Classic Moulding & Door: Crown, bed, casing, and brackets in polyurethane

Azek
www.azek.com

» Cellular PVC flat sheet (4'x8', 4'x10' and 4'x12') for gables, soffits, etc. 3/4" thick trim boards, 5/4" thick trim boards (4" and 6" widths), tongue-and-groove paneling

Royal Wood
www.royalwood.com

» Composite 1x trim boards, brickmould and T&G paneling for porch ceilings

Fypon or Duraflex
www.fypon.com

PORCH CEILINGS

Georgia-Pacific
www.gp.com

» "PlyBead Classic" or T&G

FENCING

Kroy

www.kroybp.com

» Classic Manor Collection: Vinyl, wood (picket and board-on-board), and metal (aluminum) fences in traditional designs and profiles

GARAGE DOORS

Designer Door
www.designerdoors.com

Clopay Doors
www.clopay.com

ROOF SHINGLES AND TILES

Majestic Skylines
www.majesticskylines.com

» Synthetic slate

Owens Corning
www.miravistaroof.com

» MiraVista specialty roofing: synthetic shakes, slate, copper, and metal

» Berkshire Collection: composite shingles

Tamko Roofing Products
www.lamarite.com

» Lamarite slate composite shingles

GAF
www.gaf.com

» Elk Timberline Prestique Cool Color Series: traditional shingles with solar and thermal reflectivity (UL class A fire rating)

FIXTURES

Toto

www.totousa.com

» Low-water-volume toilets

These materials and manufacturers are recommendations from individuals and contractors who have used them in similar projects. This pattern book presents these resources as a starting point. Work with your architects and/or home builders to find resources that are best for your project and budget.

Resources and Financial Incentives

A Pattern Language.
Alexander, Christopher 1976 Oxford

American Architecture Since 1780.
Whiffen, Marcus 1988 MIT Press

American House Styles.
Baker, John 2002 Norton

The Architectural Pattern Book, A Tool for Building Great Neighborhoods.
Urban Design Associates 2004 W.W. Norton

Identifying American Architecture.
Blumenson, John 1995 Rowman & Littlefield

The Visual Dictionary of American Domestic Architecture.
Carley, Rachel 1997 Henry Holt

The Grammar of Architecture.
Cole, Emily 2002 Bullfinch

Building Green Without Going in the Red.
Curtis, Kathleen and Roberta Chase 2004, Citizen's Environmental Coalition

Clues to American Architecture.
Klein, Marilyn W. and Fogle, David P. 1986 Starrhill Press

A Field Guide to American Houses.
McAlester, V. & L. 1984 Random House

What Style Is It?
Poppeliers, John 1977 John Wiley & Sons

Traditional Details for Rehabilitation and Reconstruction.
Ramsey, C. & Sleeper, H. 1998 John Wiley & Sons

Traditional Construction Patterns, Design & Detail Rules of Thumb.
Mouzon, Stephen A. 2004 McGraw-Hill

A Concise History of American Architecture.
Roth, Leland 1980 Westview Press

American Homes, An Illustrated Encyclopedia of Domestic Architecture.
Walker, Lester 1996 Black Dog & Leventhal

The American Vignola.
Ware, William R. 1994 Dover

Prints & Photographs Online Catalog
Historic American Buildings Survey/Historic American Engineering Record (HABS-HAER) Collection: www.loc.gov/pictures/ (search "your state or location," "houses," and "drawings")

Sustainable Buildings Industry Council (SBIC)
Clearinghouse for whole building design, product information, professional training, consumer education, and analytical tools: www.sbicouncil.org

The Not So Big House: A Blueprint for the Way We Really Live.
Susanka, Sarah & Obolensky, Kira 2001 Taunton Press

HISTORIC PRESERVATION WEBSITES

National Trust for Historic Preservation
www.preservationnation.org

Building Conservation
www.buildingconservation.com

Fine Homebuilding
www.finehomebuilding.com

Restore Media
www.period-homes.com
www.buildingport.com

FINANCIAL INCENTIVES

Federal Rehabilitation Tax Credit -
www.nps.gov/history/hps/tps/tax/incentives/index.htm

Maryland Sustainable Communities Tax Credit Program
http://mht.maryland.gov/taxcredits.html

Prince George's County Historic Preservation Tax Credit
www.pgplanning.org/Assets/Planning/Historic+Preservation/HPC+Forms/HPC+Tax+Credit+Application+Form.pdf

Prince George's County Historic Property Grant Program
www.pgplanning.org/About-Planning/Our_Divisions/Countywide_Planning/Historic_Preservation/Programs_and_Services/Historic_Property_Grant_Program.htm

Green Design Resources

Southface Energy Institute
www.southface.org

Whole House Energy Checklist: 50 Steps to Energy Efficiency in the Home. Passive Solar Design.
www.southface.org/web/resources&services/publications/factsheets/sf_factsheet-menu.htm

Energy Star
www.energystar.gov

Green Begins with Energystar Blue
www.energystar.gov/ia/news_homes/Green_Begins_with_ENERGYSTAR_Blue.pdf
http://www.energystar.gov/index.cfm?c=green_buildings.green_buildings_index

Healthy Building Network
Screening the Toxics Out of Building Materials.
Healthy_Building_Material_Resources.pdf
www.healthybuilding.net/target_materials.html

U.S. Secretary of the Interior's Standards and Guidelines on Historic Preservation
www.nps.gov/history/local-law/arch_stnds_0.htm

US Environmental Protection Agency
www.epa.gov

USGBC. U.S. Green Building Council
www.usgbc.org

LEED. Leadership in Energy and Environmental Design
LEED for Homes
www.usgbc.org/DisplayPage.aspx?CMSPageID=147

ACEEE. The American Council for an Energy Efficient Economy.
www.aceee.org

Environmental Home Center
www.environmentalhomecenter.com

Greenpeace USA
www.greenpeaceusa.org

The Green Guide
www.thegreenguide.com

Green Building Supply
www.greenbuildingsupply.com

Non-Toxic Building Products
www.nontoxicbuildingproducts.com

Earth Easy
www.eartheasy.com/live_nontoxic/paints.htm

Green Home Guide
www.greenhomeguide.com/know_how/article/selecting_healthy_and_environmentally_sound_finishes/#varnish

Healthy Home Plans
www.healthyhomeplans.com/articles/information7.php

McCoys
www.mccoys.com/library/differentiating-between-voc-compliant-and-low-voc-adhesives-and-sealants

Green Nest
www.greennest.com

Low-Impact Development Center
www.lowimpactdevelopment.org

Materials, manufacturers and resources presented in this section are provided as recommendations only. The tools and information may not be appropriate in all cases. While this Pattern Book makes every effort to provide accurate and complete information, various data such as names, telephone numbers, websites, etc. may change prior to updating.

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